Millermatic® 252

Issued Sept. 2008 • Index No. DC/12.49

MIG Arc Welding Power Source

Quick Specs

Industrial Applications
Metal Fabrication
Maintenance and Repair
Farm/Home
Light Industrial

Processes
MIG (GMAW)
Flux Cored (FCAW)

Input Power
200(208)/230 V
230/460/575 V

Rated Output 200 Amps at 28 VDC, 60% Duty Cycle
250 Amps at 28 VDC, 40% Duty Cycle

Max. Open-Circuit Voltage 38

Amperage Range 30–300 A

Wire Feed Speed 50–700 IPM (1.3–17.8 m/min)

Weight 207 lb (94 kg)

The Power of Blue®

Highest output in its class (250 A at 28 VDC). Weld longer on high end applications.

Large, digital front panel with built-in digital timers menu enables operator to preset voltage and wire feed speed. Standard run-in, pre/postflow, burnback, spot/delay (stitch) timer menu.

Auto Gun Detect™ allows operator to simply pull trigger on MIG gun, spool gun or push/pull gun. Automatically detects and recalls the voltage, wire feed speed and timer of the active gun. See page 3 for more information.

Push-Pull Gun Direct Connect — now directly connects your push-pull gun, no extra module required.

Angled, dual-gear driven, cast aluminum drive system features no-tool, quick-change reversible drive rolls and an easy-to-set, scaled tension knob. See page 3 for more information.

Patent-pending EZ-Change™ Low Cylinder Rack allows operators to easily roll cylinders on and off of rack—no need to lift cylinders. See page 3 for more information.

Comes Complete With:

- 10 ft (3 m) power cord and plug (200/230 V model only)
- 15 ft (4.6 m), 250 amp M-25 MIG gun for .030/.035 in wire
- 10 ft (3 m) work cable and clamp
- Argon mix regulator/flow gauge and hose
- Extra contact tips
- Factory-installed running gear with EZ-Change™ Low Cylinder Rack
- .030/.035 in reversible drive rolls
- Set-up and operation interactive CD

EZ-Access™ Consumable Compartment and Parameter Chart — set weld parameters right the first time with convenient new flip-down compartment that provides fast access to parameter chart and consumables. See page 3 for more information.

Larger work area — now with longer 15-ft M-25 gun.

Fan-On-Demand™ cooling system only operates when needed, reducing power consumption and contaminants drawn into the machine.

Less weld cleanup with Active Arc Stabilizer™ — patented Miller design provides excellent starts proven superior to the competition.

Line voltage compensation keeps power constant even if power input varies by ±10%.

TRUE BLUE® 3YR. WARRANTY

Welder is warranted for 3 years, parts and labor.
Original main power rectified parts are warranted for 5 years.
Gun warranted for 90 days, parts and labor.

MADE IN USA
APPLETON, WI

Miller Electric Mfg. Co.
An Illinois Tool Works Company
1635 West Spencer Street
Appleton, WI 54914 USA

International Headquarters
Phone: 920-735-4505
USA FAX: 920-735-4134
Canadian FAX: 920-735-4169
International FAX: 920-735-4125

Web Site
www.MillerWelds.com

ISO 9001:2000 REGISTERED QUALITY SYSTEM

Specifications (Subject to change without notice.)

CV DC 1 Phase

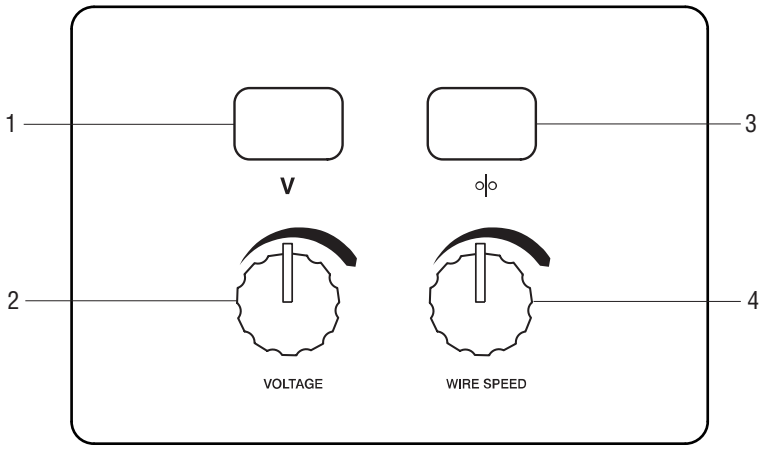
Rated Output	Amperage Range	Max. Open-Circuit Voltage	Amps Input at Rated Output, 60 Hz 200(208) V	230 V	460 V	575 V	KVA	KW	Wire Type and Diameter	Wire Feed Speed	Max. Spool Size	Dimensions	Net Weight
200 A, 28 VDC at 60% Duty Cycle 250 A, 28 VDC at 40% Duty Cycle	30–300 A	38	48 2.3*	42 2*	21 1*	17 0.8*	9.8 0.46*	7.5 0.13*	**Solid/Stainless Steel:** .023–.045 in (0.6–1.2 mm) **Flux Cored:** .030–.045 in (0.8–1.2 mm)	50–700 IPM (1.3–17.8 m/min)	12 in (305 mm)	H: 30 in (762 mm) W: 19 in (483 mm) D: 40 in (1016 mm)	207 lb (94 kg)

**While idling.*

Note: Operating Temperature Range: -4˚ to +104˚ F (-20 to +40˚ C) Storage Temperature Range: -22˚ to +122˚ F (-30 to +50˚ C)

Certified to both the Canadian and U.S. Standards for welding equipment.

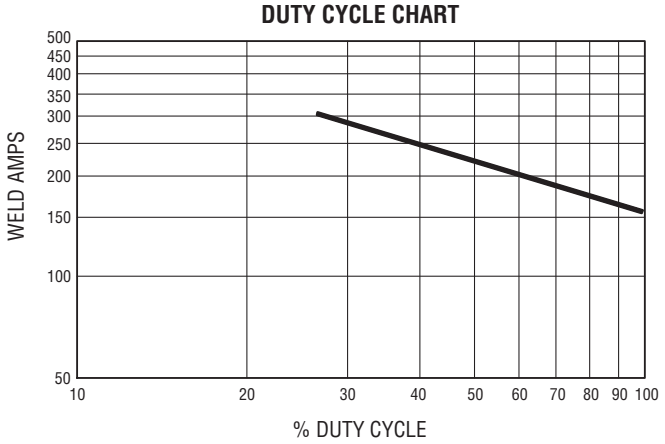
Control Panel



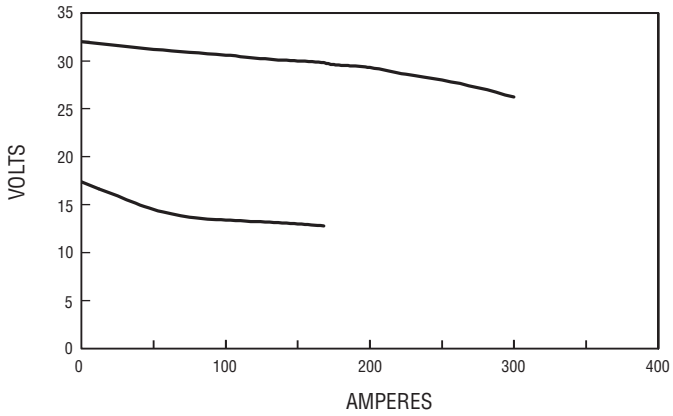
1. Voltmeter
2. Voltage Control
3. Wire Speed Meter
4. Wire Speed Control

Performance Data

DUTY CYCLE CHART



VOLT/AMP CURVES



Miller

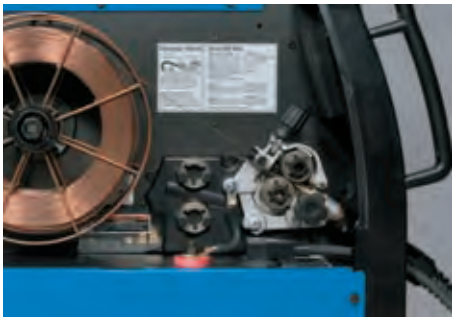
Standard Fully Loaded Features

EZ-Change™ Low Cylinder Rack

- Patent-pending design — operators no longer need to lift cylinders. Cylinders now easily roll on and off our EZ-Change™ Low Cylinder Rack.

Angled Wire Drive

- Angled industrial aluminum dual-gear drive system significantly improves wirefeeding and runs large spools of wire.
- Allows quick change of drive rolls without tools.
- Drive roll storage — no more lost drive rolls, extra drive rolls are conveniently stored next to drive motor.
- Operators no longer bump into and bend MIG gun and gun liner.



Dual Front Handles

- Exclusive split handle with rubber grips designed to move machine easily and allow work lead and MIG gun to be stored independently.
- Handles provide protection for front panel and MIG gun during transportation.

EZ-Access™ Consumable Compartment and Parameter Chart

- Convenient flip-down compartment holds parameter chart and storage for consumables.

Auto-Gun Detect™

- Simply pull the trigger for either the MIG, spool gun or any Miller push-pull gun. The Millermatic 252 automatically recalls voltage, wire feed speed and timer of the active gun.
- Reduces setup time!

Optional Fully Loaded Features

Elevated Gun and Cable Rack

#300 335

- Tangle-free, independent way to store spool gun cables, keeping them off of the floor.
- No more running over spool gun cables or cables dragging on the floor.
- Elevated Gun and Cable Rack can be used with either a single or dual cylinder rack. (Elevated Gun and Cable Rack is included with the Dual EZ-Change™ Low Cylinder Rack.)

Dual EZ-Change™ Cylinder Rack with Elevated Gun and Cable Rack

#300 337

- Dual cylinder rack allows for easy storage for two cylinders.
- EZ-Change™ Low Cylinder rack eliminates the need to lift cylinders on and off cylinder rack.
- No more running over spool gun cables or cables dragging on the floor.
- Tangle-free, independent way to store spool gun cables, keeping them off of the floor.

Genuine Miller Accessories

Direct connection for all Miller push-pull guns.

- Able to utilize 12 in rolls of aluminum wire inside the Millermatic 252 for extended aluminum welding time.
- Wire feed speed is adjustable at the gun and actual speed can be seen on the digital display on the Millermatic 252.
- Adjustable run-in control to fine tune arc starting.

XR-A Aluma-Pro Gun
#300 000 15 ft (4.6 m) Cable
#300 001 25 ft (7.6 m) Cable
300 amps at 100% duty cycle.

XR-A Pistol Gun
#198 127 15 ft (4.6 m) Cable
#198 128 30 ft (9 m) Cable
200 amps at 100% duty cycle.

U-Groove Aluminum Drive Roll and Accessory Kits

Note: XR-A Pistol kits include U-groove machine drive rolls, nylon wire guides, gun drive rolls and contact tips. XR-A Python/Aluma-Pro kits include U-groove machine drive rolls, nylon wire guides and contact tips.

For XR-A Pistol
#195 201 .035 in (0.9 mm)
#195 273 .040 in (1 mm)
#195 202 .047 in (1.2 mm)

For XR-A Python/Aluma-Pro
#195 311 .035 in (0.9 mm)
#195 312 .040 in (1 mm)
#195 313 .047 in (1.2 mm)

M-25 Replacement Gun
#169 594 10 ft (3 m)
#169 596 12 ft (3.7 m)
#169 598 15 ft (4.6 m) standard
Gun shipped to run .030–.035 in (0.8–0.9 mm) wire.

Spoolmatic® 15A Spool Gun #195 156
Spoolmatic® 30A Spool Gun #130 831
Ideal for aluminum welding jobs. 200 amp, 100% duty cycle, air-cooled, 1 lb spool gun with your choice of 15 ft or (4.6 m) 30 ft (9.1 m) cable assembly. For detailed information, see Spoolmatic literature, Index No. M/1.2.

Dual EZ-Change™ Low Cylinder Rack with Elevated Gun and Cable Rack #300 337
Dual cylinder rack allows operators to easily roll cylinders on and off the rack with no lifting. Gun and cable rack keeps cables off the floor and tangle free.

Elevated Gun and Cable Rack #300 335
For use with single cylinder rack. *(Included with Dual EZ-Change Low Cylinder Rack.)*

Protective Cover with Helmet Bag #195 142
Features side pocket and helmet bag. *(Not for use with Dual Cylinder Rack or Elevated Gun and Cable Rack.)*

Argon/Mixed Gas Regulator and Gas Hose #195 050
(Order from Miller Service Parts.)

CO_2 Regulator/Flow Gauge #237 702
Required if using 100% CO_2 gas.
(Order from Miller Service Parts.)

Consumables (Order from Miller Service Parts.)

For M-25 Gun

Contact Tips
#087 299 .023/.025 in (0.6 mm)
#000 067 .030 in (0.8 mm)
#000 068 .035 in (0.9 mm)
#000 069 .045 in (1.2 mm)
#187 117 .035 in (0.9 mm) heavy-duty tip
#187 118 .045 in (1.2 mm) heavy-duty tip

Tapered Contact Tips
#176 797 .030 in (0.8 mm)
#176 793 .035 in (0.9 mm)
#176 794 .045 in (1.2 mm)

Contact Tip Adapter #169 728

Replacement Liners
#194 010 .023/.025 in
#194 011 .030–.035 in (standard)
#194 012 .035–.045 in

Nozzles
Note: Flush or stickout nozzles should be used for the short-circuit process. Recessed nozzles should be used for the spray arc process.

#200 258 Standard
1/2 in (13 mm) diameter orifice. Nozzle flush with contact tip.

#169 726
5/8 in (16 mm) diameter orifice. Nozzle flush with contact tip.

#169 727
5/8 in (16 mm) diameter orifice. Contact tip sticks out of nozzle 1/8 in (3.2 mm).

#169 724
1/2 in (13 mm) diameter orifice. Contact tip recessed 1/8 in (3.2 mm) into nozzle.

#169 725
5/8 in (16 mm) diameter orifice. Contact tip recessed 1/8 in (3.2 mm) into nozzle.

Spot Nozzles
#176 238 Flat
#176 240 Inside corner
#176 242 Outside corner

Tapered Nozzles
Note: Tapered tips are recommended when using a tapered nozzle.
#176 243 3/8 in (9.5 mm) diameter orifice
#178 386 11/32 in (8.7 mm) diameter orifice

Consumable Kits
#234 610 .030 in (0.8 mm)
#234 611 .035 in (0.9 mm)
#234 612 .045 in (1.2 mm)
Contains 10 contact tips, 1 nozzle, 1 contact tip adapter, and 1 nozzle adapter.

Drive Rolls

Note: Drive roll kits include two drive rolls and an inlet guide.

V-Grooved Drive Roll Kits (solid wire)
#204 579 .030 & .035 in (0.8 & 0.9 mm) Combination (Reversible)
#087 131 .023/.025 in (0.6 mm)
#079 594 .030 in (0.8 mm)
#079 595 .035 in (0.9 mm)
#079 596 .045 in (1.2 mm)

V-Knurled Drive Roll Kits
(Flux Cored or difficult-to-feed wire)
#079 606 .035 in (0.9 mm)
#079 607 .045 in (1.2 mm)

Ordering Information

Steel Configuration

	Stock No.	Description	Qty.	Price
Millermatic® 252	**#907 321** **#907 322**	200(208)/230 V, 60 Hz 230/460/575 V, 60 Hz		
V-Groove Drive Roll Kits (solid wire)	**#087 131** **#079 594** **#079 595** **#079 596**	.023/.025 (0.6 mm) .030 (0.8 mm) .035 (0.9 mm) .045 (1.2 mm)		
V-Knurled Drive Roll Kits (flux cored)	**#079 606** **#079 607**	.035 (0.9 mm) .045 (1.2 mm)		
Contact Tips (10 per package)	**#087 299** **#000 067** **#000 068** **#000 069**	.023/.025 (0.6 mm) .030 (0.8 mm) .035 (0.9 mm) .045 (1.2 mm)		
Nozzles	**#169 724** **#169 725** **#200 258** **#169 726** **#169 727**	1/2 in (13 mm) diameter, 1/8 in (3.2 mm) recessed 5/8 in (16 mm) diameter, 1/8 in (3.2 mm) recessed 1/2 in (13 mm) diameter, flush. *Included with standard configuration* 5/8 in (16 mm) diameter, flush 5/8 in (16 mm) diameter, 1/8 in (3.2 mm) exposed		

Aluminum Configuration (Spool Gun)

Millermatic® 252 Spool Gun Packages (Also includes standard M-25 MIG gun)	**#951 066**	200(208)/230 V, 60 Hz with Spoolmatic® 30A, dual cylinder rack, elevated gun and cable rack, regulator and hose		
	#951 065	230/460/575 V, 60 Hz with Spoolmatic® 30A, dual cylinder rack, elevated gun and cable rack, regulator and hose		
Spool Gun Contact Tips (10 per package)	**#206 187** **#206 188** **#206 189**	.035 (0.9 mm) .040 (1.0 mm) .047 (1.2 mm)		
Spool Gun Nozzles	**#198 855** **#199 618** **#199 616** **#199 617**	5/8 in (16 mm) diameter 5/8 in (16 mm) diameter, HD 3/4 in (19 mm) diameter 3/4 in (19 mm) diameter, HD		

For M-25 gun consumables and Millermatic 252 drive rolls see steel configuration chart above.

Aluminum Configuration (Push-Pull Guns)

Millermatic® 252 (Includes standard M-25 MIG gun)	**#907 321** **#907 322**	200(208)/230 V, 60 Hz 230/460/575 V, 60 Hz		
XR™-A Aluma-Pro Gun	**#300 000** **#300 001**	15 ft (4.6 m) 25 ft (7.6 m)		
XR™-A Pistol	**#198 127** **#198 128**	15 ft (4.6 m) 30 ft (9.1 m)		
XR™-A Pistol U-Groove Drive Roll Kits (required)	**#195 201** **#195 273** **#195 202**	.035 (0.9 mm) .040 (1.0 mm) .047 (1.2 mm)		
XR™-A Aluma-Pro U-Groove Drive Roll Kits (required)	**#195 311** **#195 312** **#195 313**	.035 (0.9 mm) .040 (1.0 mm) .047 (1.2 mm)		
Contact Tips (10 per package)	**#206 187** **#206 188** **#206 189**	.035 (0.9 mm) .040 (1.0 mm) .047 (1.2 mm)		
Nozzles	**#198 855** **#199 618** **#199 616** **#199 617**	5/8 in (16 mm) diameter 5/8 in (16 mm) diameter, HD 3/4 in (19 mm) diameter 3/4 in (19 mm) diameter, HD		
Dual EZ-Change™ Low Cylinder Rack with Elevated Gun and Cable Rack	**#300 337**			
Elevated Gun and Cable Rack	**#300 335**	For use with single cylinder rack. *(Included with Dual EZ-Change Low Cylinder Rack.)*		

For M-25 gun consumables and Millermatic 252 drive rolls see steel configuration chart above.

Date: **Total Quoted Price:**

Ordering Information

Accessories

Gun Convenience Kit for Steel	**#193 975**	*(Order from Miller Service Parts.)*		
XR™-A Aluma-Pro™	**#300 000** **#300 001**	15 ft (4.6 m) 25 ft (7.6 m)		
XR™-A Pistol Gun	**#198 127** **#198 128**	15 ft (4.6 m) 30 ft (9 m)		
M-25 Gun	**#169 594** **#169 596** **#169 598**	10 ft (3 m), .023–.035 in (0.6–0.9 mm) 12 ft (3.7 m), .023–.035 in (0.6–0.9 mm) 15 ft (4.6 m), .023–.035 in (0.6–0.9 mm)		
Spoolmatic® 15A	**#195 156**	Spool gun for aluminum		
Spoolmatic® 30A	**#130 831**	Spool gun for aluminum		
Dual EZ-Change™ Low Cylinder Rack with Elevated Gun and Cable Rack	**#300 337**			
Elevated Gun and Cable Rack	**#300 335**	For use with single cylinder rack. *(Included with Dual EZ-Change Low Cylinder Rack.)*		
Protective Cover with Helmet Bag	**#195 142**	Features side pocket and helmet bag		
Argon/Mixed Gas Regulator and Gas Hose	**#195 050**	*(Order from Miller Service Parts.)*		
CO_2 Regulator/Flow Gauge	**#237 702**	Required if using 100% CO_2 gas. *(Order from Miller Service Parts.)*		

Date: **Total Quoted Price:**

Note: See page 7 for ordering information on Millermatic 252, available packages, and steel and aluminum configurations.

Distributed by:

Litho in USA

Deltaweld® Series

Issued April 2008 • Index No. DC/16.2

MIG Welding Power Source

Quick Specs

Heavy Industrial Applications
Heavy Equipment Manufacturing
Truck and Trailer Manufacturing
Ship and Boat Building
Tank/Pressure Vessel Fabrication
Manufacture of Automotive Equipment
Railcar/Locomotive Fabrication and Repair
Furniture Manufacture
Structural Steel Fabrication
Sheet Metal Fabrication
Maintenance

Processes
MIG (GMAW)
Flux Cored (FCAW)
Air Carbon Arc (CAC-A) Cutting and Gouging
Submerged Arc (SAW)

Input Power
302/402: 3-Phase Power
452/602: 3-Phase Power
652/852: 3-Phase Power

Rated Output
302/402: 300 A at 32 VDC, 100% Duty Cycle
452/602: 450 A at 38 VDC, 100% Duty Cycle
652/852: 650 A at 44 VDC, 100% Duty Cycle

Weight
302/402: 323 lb (147 kg)
452/602: 384 lb (174 kg)
652/852: 472 lb (214 kg)

The Power of Blue®

THREE 3 OPTIONS
NEW! MIG Power Source Solutions

See option and package descriptions on page 5.

Superior arc welding performance with MIG welding.

Internal digital voltage control (DVC) enables operator to preset weld voltage before striking an arc.

Two positive output terminals provide high/low stabilizer selection. Allows operator to optimize arc performance.

Line voltage compensation ensures consistent weld performance by keeping output power constant even if primary input power varies by ±10%.

Simple control panel provides easy, efficient operation.

Digital voltmeter and ammeter are easy to read, even at 30 ft (9.2 m).

14-pin receptacle provides quick, direct connection to Miller 14-pin wire feeders and accessories.

115 V duplex receptacle provides 15 amps of auxiliary power.

Thermal overload protection light indicates power shutdown. Helps prevent machine damage if the duty cycle is exceeded or airflow is blocked.

Deltaweld® 452 MIGRunner® Package shown

Remote on/off capabilities allow operator to turn power source on/off from a distance.

Remote voltage control allows operator to change voltage from feeder.

Power efficient for exceptional value and return on your investment.

Fan-On-Demand™ operates only when needed reducing noise, power consumption, and the amount of airborne contaminants pulled through the machine.

Enclosed circuit boards provide additional protection from contaminants resulting in longer service life.

PC board protection prevents the wire feeder power or other stray voltages (less than 115 VAC) from harming the power source PC board.

Power cord strain relief provided for your convenience at installation.

TRUE BLUE® 3 YR. WARRANTY

Power source is warranted for 3 years, parts and labor.
Original main power rectified parts are warranted for 5 years.

MADE IN USA
APPLETON, WI

Miller®

Miller Electric Mfg. Co.
An Illinois Tool Works Company
1635 West Spencer Street
Appleton, WI 54914 USA

International Headquarters
Phone: 920-735-4505
USA FAX: 920-735-4134
Canadian FAX: 920-735-4169
International FAX: 920-735-4125

Web Site
www.MillerWelds.com

ISO 9001:2000 REGISTERED QUALITY SYSTEM

Deltaweld® 302/402 Specifications (Subject to change without notice.)

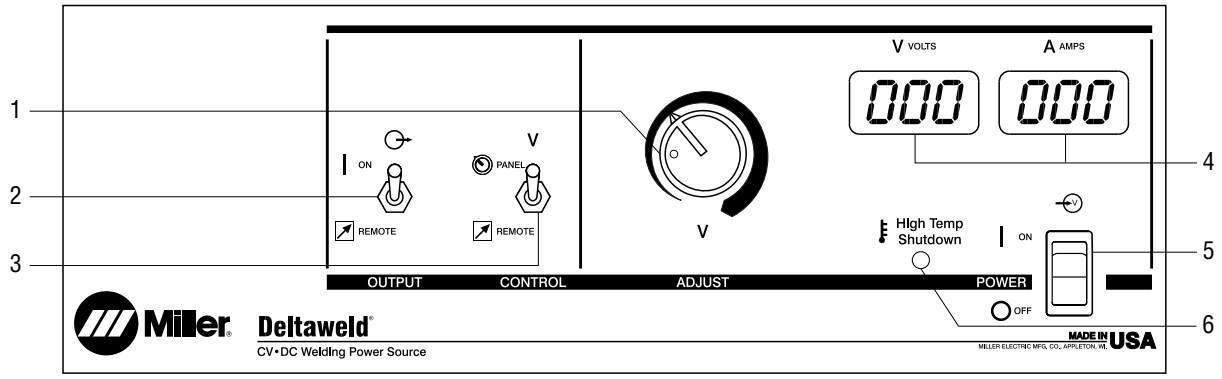
Rated Output	Voltage Range	Recommended Welding Range	Max. Open-Circuit Voltage	Amps Input at Rated Output, 50/60 Hz 200 V	230 V	380 V	400 V	440 V	460 V	575 V	KVA	KW	Dimensions	Net Weight
300 A at 32 VDC, 100% Duty Cycle	10–32 V	15–32 V	44 VDC	48	42	27	25	23	21	17	16.9	12.9	H: 30 in (762 mm) including lift eye W: 23 in (585 mm) D: 30-1/2 in (775 mm) including strain relief	323 lb (147 kg)

Note: For input conductor and fuse size information consult the Owner's Manual.

Certified to both the Canadian and U.S. Standards for welding equipment.

50 Hz models with CE Specifications are manufactured according to the Standards IEC-974-1 and EN-60974-1.

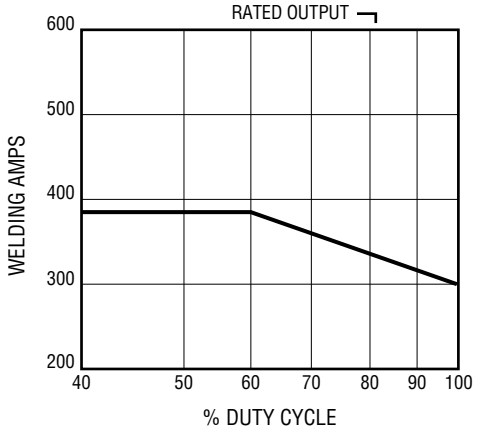
Control Panel



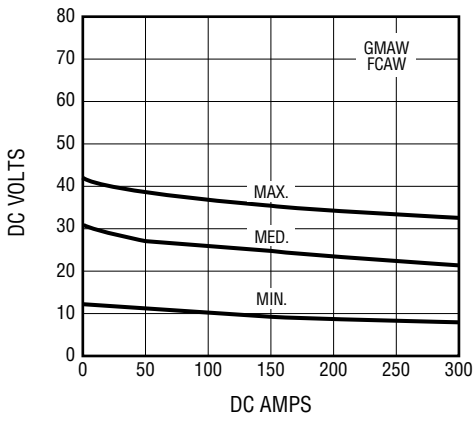
1. Voltage Adjustment Control
2. Output Switch
3. Remote Voltage Control Switch
4. Digital Meters
5. Power Switch with Indicator Light
6. High Temperature Shutdown Light

Performance Data

DUTY CYCLE CHART



VOLT/AMP CURVE CV



Deltaweld® 452/602 Specifications (Subject to change without notice.)

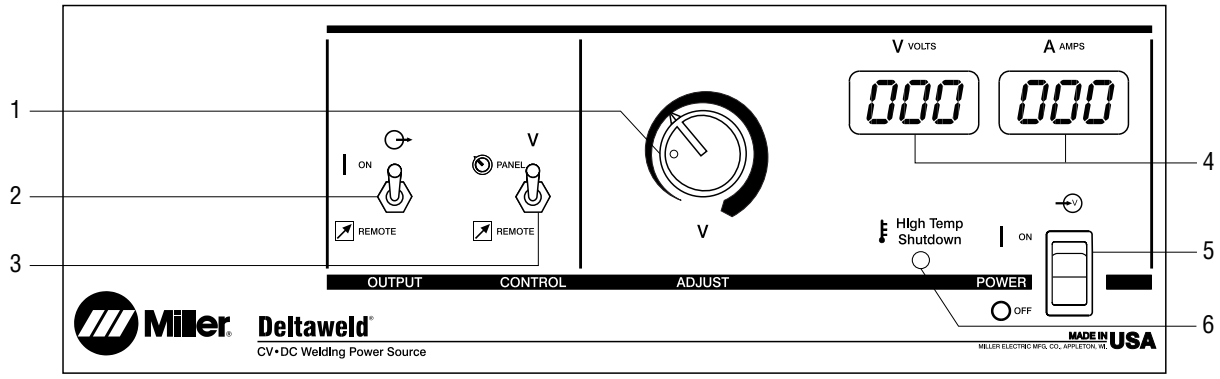
Rated Output	Voltage Range	Recommended Welding Range	Max. Open-Circuit Voltage	Amps Input at Rated Output, 50/60 Hz 200 V	230 V	380 V	400 V	440 V	460 V	575 V	KVA	KW	Dimensions	Net Weight
450 A at 38 VDC, 100% Duty Cycle	10–38 V	15–38 V	48 VDC	72	63	39	37	33	32	25	25.1	21.1	H: 30 in (762 mm) including lift eye W: 23 in (585 mm) D: 38 in (966 mm) including strain relief	384 lb (174 kg)

Note: For input conductor and fuse size information consult the Owner's Manual.

Certified to both the Canadian and U.S. Standards for welding equipment.

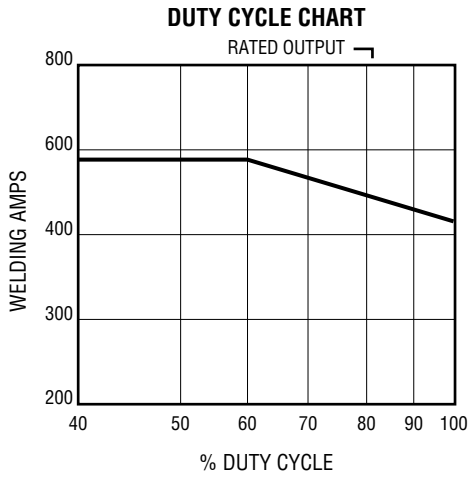
50 Hz models with CE Specifications are manufactured according to the Standards IEC-974-1 and EN-60974-1.

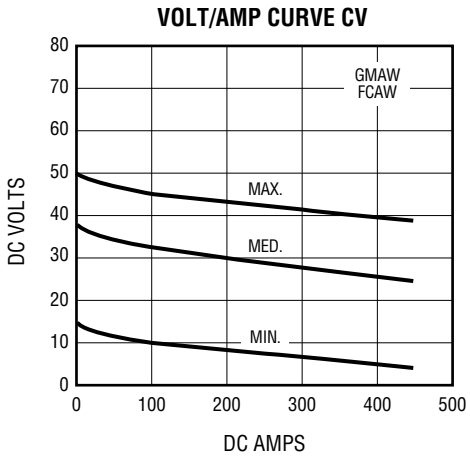
Control Panel



1. Voltage Adjustment Control
2. Output Switch
3. Remote Voltage Control Switch
4. Digital Meters
5. Power Switch with Indicator Light
6. High Temperature Shutdown Light

Performance Data





Deltaweld® 652/852 Specifications (Subject to change without notice.)

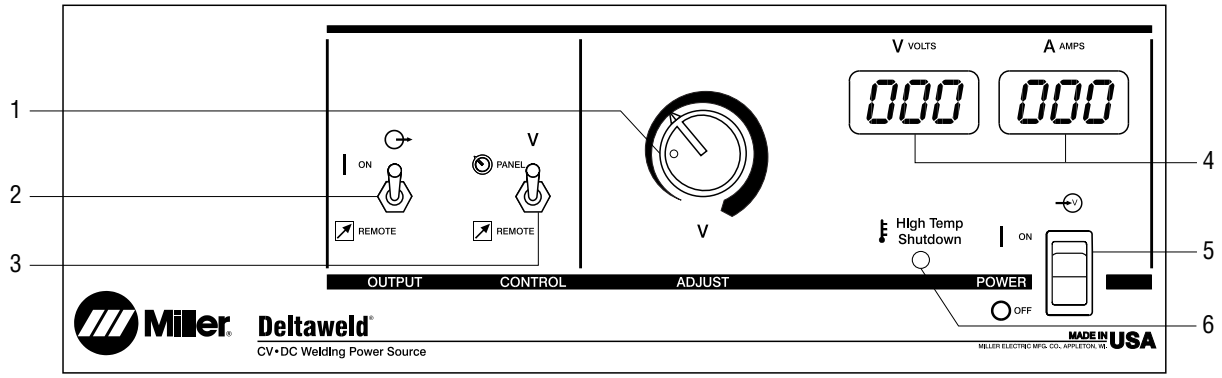
Rated Output	Voltage Range	Recommended Welding Range	Max. Open-Circuit Voltage	Amps Input at Rated Output, 50/60 Hz 230 V	380 V	400 V	440 V	460 V	575 V	KVA	KW	Dimensions	Net Weight
650 A at 44 VDC, 100% Duty Cycle	10–44 V	15–44 V	54 VDC	96	58	54	50	48	38	38.2	34.2	H: 30 in (762 mm) including lift eye W: 23 in (585 mm) D: 38 in (966 mm) including strain relief	472 lb (214 kg)

Note: For input conductor and fuse size information consult the Owner's Manual.

Certified to both the Canadian and U.S. Standards for welding equipment.

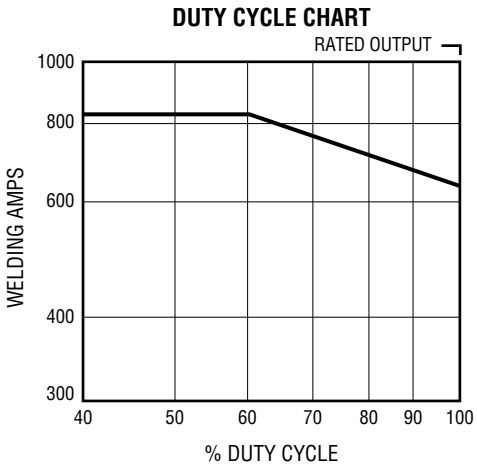
50 Hz models with CE Specifications are manufactured according to the Standards IEC-974-1 and EN-60974-1.

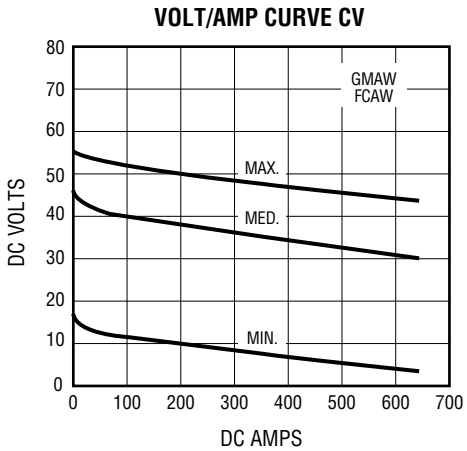
Control Panel



1. Voltage Adjustment Control
2. Output Switch
3. Remote Voltage Control Switch
4. Digital Meters
5. Power Switch with Indicator Light
6. High Temperature Shutdown Light

Performance Data





Genuine Miller Options

Air Filter Kit #042 939 Field
Reusable air filter helps protect internal components from dust and dirt, reducing need for maintenance and providing extended service life. Easily attaches and detaches from front of the power source.

Ground Current Sensor #195 048 Field
Disables power source if weld current is present on primary ground.

Packages

THREE 3 OPTIONS
NEW! MIG Power Source Solutions

Option #1: Deltaweld® Power Sources

Purchase components separately.

Deltaweld® 302
#903 376 (200-208/230/460 V, 60 Hz)
#903 392 (230/460/575 V, 60 Hz)

Deltaweld® 452
#903 377 (200-208/230/460 V, 60 Hz)
#903 394 (230/460/575 V, 60 Hz)

Deltaweld® 652
#903 396 (230/460/575 V, 60 Hz)

Option #2: Deltaweld® Stationary Packages

Stationary display without running gear/cylinder rack.

Deltaweld® 302
#951 084 (200-208/230/460 V, 60 Hz)
#951 127 (230/460/575 V, 60 Hz)

Deltaweld® 452
#951 085 (200-208/230/460 V, 60 Hz)
#951 128 (230/460/575 V, 60 Hz)

Deltaweld® 652
#907 086 (230/460/575 V, 60 Hz)

Comes complete With:

- Deltaweld® power source
- S-74D wire feeder
- Bernard® Q-Gun™
- Industrial MIG 4/0 Kit: Smith® regulator/flowmeter with 10 ft (3 m) gas hose, 10 ft (3 m) 4/0 feeder weld cable with lugs, and 15 ft (4.6 m) work cable with 600-amp C-clamp

Option #3: Deltaweld® MIGRunner® Packages

MIGRunner system with factory-installed running gear/cylinder rack.

Deltaweld® 302
#951 107 (200-208/230/460 V, 60 Hz)
#951 129 (230/460/575 V, 60 Hz)

Deltaweld® 452
#951 108 (200-208/230/460 V, 60 Hz)
#951 130 (230/460/575 V, 60 Hz)

Deltaweld® 652
#951 109 (230/460/575 V, 60 Hz)

Comes complete With:

- Deltaweld® power source
- S-74D wire feeder
- Bernard® Q-Gun™
- Industrial MIG 4/0 Kit: Smith® regulator/flowmeter with 10 ft (3 m) gas hose, 10 ft (3 m) 4/0 feeder weld cable with lugs, and 15 ft (4.6 m) work cable with 600-amp C-clamp
- Factory installed running gear/cylinder rack

Genuine Miller Accessories

NEW! **Industrial MIG 4/0 Kit #300 390**
Consists of Smith® regulator/flowmeter with 10 ft (3 m) gas hose, 10 ft (3 m) 4/0 feeder weld cable with lugs, and 15 ft (4.6 m) work cable with 600-amp C-clamp.

Remote On/Off Control #042 869
Allows you to turn power source on or off from a distance of 20 ft (6 m). This is especially useful if your power source is located up in a mezzanine.

Polarity Control #042 871
This dual-function control is designed for use with dual wire feeders or any application where electrical isolation and/or polarity reversing of weld current is required. Both functions can be used at the same time.

Process Control Selector #042 872
Allows you to easily change weld processes. Also includes features of Polarity Control.

Extension Cables for 14-Pin Plugs to 14-Pin Sockets
#122 973 25 ft (7.6 m)
#122 974 50 ft (15.2 m)
#122 975 75 ft (22.8 m)
This extension cord makes a direct connection between the power source and the accessory control or wire feeder. No messy splicing or adapting required.

Standard Running Gear #042 886
The large 10 in (254 mm) rear wheels and 5 in (127 mm) front casters on this running gear provide excellent mobility on the shop floor, making it easier to move the power source around and over cables and cracks. Very easy to install. Handles double as weld cable holder.

Standard Cylinder Rack #042 887
Holds two cylinders. Only installs on Standard Running Gear.

Water Coolant Systems

For more information, see Miller Coolant Systems Lit. Index No. AY/7.2.

Coolmate™ 3
#043 007 115 VAC
#043 008 230 VAC
For use with water-cooled torches rated up to 600 amps. Unique paddle-wheel indicator, external filter and easy fill spout.

Coolmate™ V3 #043 009 115 VAC
For use with water-cooled torches rated up to 500 amps. Vertical design conveniently mounts to Miller cylinder rack in place of one cylinder.

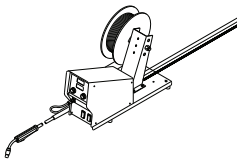
Coolmate™ 4 #042 288 115 VAC
For use with water-cooled torches rated up to 600 amps. Tough molded polyethylene case with carrying handle.

Coolant #043 810
Sold in cases of four 1-gallon recyclable plastic bottles. Miller coolants contain a base of ethylene glycol and deionized water to protect against freezing to -37˚F (-38˚C) or boiling to 227˚F (108˚C). Also contains a compound that resists algae growth.

Wire Feeder Options

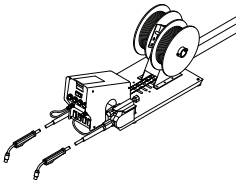
Bench-Style Feeders

	Lit. Index No.
S-22A	M/11.0
S-24A	M/11.0
S-74S	M/3.0
S-74D	M/3.0
S-74DX	M/3.0



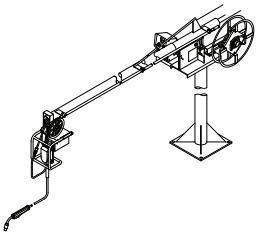
Bench-Style Dual Feeders

D-74S	M/3.0
D-74D	M/3.0
D-74DX	M/3.0



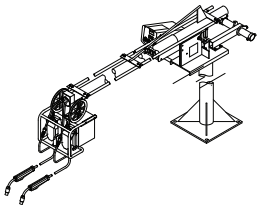
Boom-Style Feeders

SS-74S12	M/13.11
SS-74S16	M/13.11
SS-74D12	M/13.11
SS-74D16	M/13.11
SS-74DX12	M/13.11
SS-74DX16	M/13.11



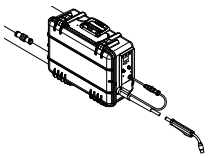
Boom-Style Dual Feeders

DS-74S12	M/13.11
DS-74S16	M/13.11
DS-74D12	M/13.11
DS-74D16	M/13.11
DS-74DX12	M/13.11
DS-74DX16	M/13.11



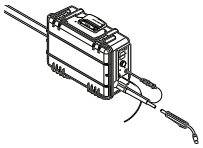
Portable Feeders

Suitcase 8RC	M/6.5
Suitcase 12RC	M/6.5



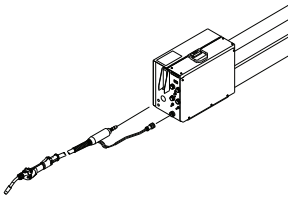
Portable Voltage Sensing Feeders

SuitCase™ X-TREME™ 8VS	M/6.41
SuitCase™ X-TREME™ 12VS	M/6.41



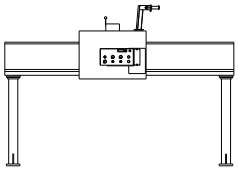
Aluminum Push-Pull Feeders

XR Control	M/1.7
Guns available:	
XR-Aluma-Pro A	M/1.71
XR-Aluma-Pro W	M/1.71
XR-A Python	M/1.71



Hard Automation

Control Detach Kit 70 Series	M/3.0



Ordering Information

Equipment and Options	Stock No.	Description	Qty.	Price
Power Source				
Deltaweld® 302 Power Source Only	**#903 376*** **#903 392***	200-208/230/460 V, 60 Hz 230/460/575 V, 60 Hz		
Deltaweld® 302 Stationary Package	**#951 084*** **#951 127***	200-208/230/460 V, 60 Hz 230/460/575 V, 60 Hz		
Deltaweld® 302 MIGRunner Package	**#951 107*** **#951 129***	200-208/230/460 V, 60 Hz 230/460/575 V, 60 Hz		
Deltaweld® 402 Power Source Only	**#907 285****	380/400/440 V, 50 Hz w/**CE**		
Deltaweld® 452 Power Source Only	**#903 377*** **#903 394***	200-208/230/460 V, 60 Hz 230/460/575 V, 60 Hz		
Deltaweld® 452 Stationary Package	**#951 085*** **#951 128***	200-208/230/460 V, 60 Hz 230/460/575 V, 60 Hz		
Deltaweld® 452 MIGRunner Package	**#951 108*** **#951 130***	200-208/230/460 V, 60 Hz 230/460/575 V, 60 Hz		
Deltaweld® 602 Power Source Only	**#907 286****	380/400/440 V, 50 Hz w/**CE**		
Deltaweld® 652 Power Source Only	**#903 396***	230/460/575 V, 60 Hz		
Deltaweld® 652 Stationary Package	**#951 086***	230/460/575 V, 60 Hz		
Deltaweld® 652 MIGRunner Package	**#951 109***	230/460/575 V, 60 Hz		
Deltaweld® 852 Power Source Only	**#907 287****	380/400/440 V, 50 Hz w/**CE**		
Air Filter Kit	**#042 939**	Field		
Ground Current Sensor	**#195 048**	Field		
Wire Feeders				
70 Series		See Lit. Index No. M/3.0		
22A	**#193 066**	See Lit. Index No. M/11.0		
24A	**#195 112**	See Lit. Index No. M/11.0		
SuitCase™ 8RC	**#194 938**	See Lit. Index No. M/6.5		
SuitCase™ 12RC	**#194 940**	See Lit. Index No. M/6.5		
SuitCase™ X-TREME™ 8VS	**#300 093**	See Lit. Index No. M/6.41		
SuitCase™ X-TREME™ 12VS	**#195 500**	See Lit. Index No. M/6.41		
XR™-Control	**#181 538**	See Lit. Index No. M/1.7		
Swingarc™ Boom Feeders		See Lit. Index No. M/13.11		
Extension Cables	**#122 973** **#122 974** **#122 975**	25 ft (7.6 m) 50 ft (15.2 m) 75 ft (22.8 m)		
Miscellaneous				
Industrial MIG 4/0 Kit	**#300 390**	Includes Smith regulator/flowmeter with 10 ft (3 m) gas hose, 10 ft (3 m) 4/0 feeder weld cable with lugs, and 15 ft (4.6 m) work cable with 600-amp C-clamp		
Remote On/Off Control	**#042 869**			
Polarity Control	**#042 871**			
Process Control Selector	**#042 872**			
Standard Running Gear	**#042 886**			
Standard Cylinder Rack	**#042 887**			
Coolmate™ 3	**#043 007** **#043 008**	115 VAC 230 VAC		
Coolmate™ V3	**#043 009**	115 VAC		
Coolmate™ 4	**#042 288**	115 VAC		
Coolant	**#043 810**			
Primary Power Cable				
Secondary Welding Cables				
Work Cable and Clamp				

Date: **Total Quoted Price:**

**CSA* *Certified to both the Canadian and U.S. Standards for welding equipment.*

***CE* *50 Hz models with CE Specifications are manufactured according to the Standards IEC-974-1 and EN-60974-1. Conforms with NEMA EW 1 "Electric Arc Welding Power Source," Class I (100).*

Distributed by:

Miller

Litho in USA

22A and 24A

Issued May 2007 • Index No. M/11.0

24 Volt Constant-Speed Wire Feeder

Quick Specs

Industrial Applications
Heavy- or Light-Duty
Fabrication Shops
Trailer Manufacturers
Furniture Manufacturers
Automotive Products
Educational Institutions

Processes
MIG (GMAW)
Flux Cored (FCAW)
Gas- and Self-Shielded

For use with CV power sources

Input Power 24 VAC, 7 A, 50/60 Hz

Electrode Wire Diameter Capacity
22A: .023–5/64 (0.6–2.0 mm)
24A: .023–3/32 (0.6–2.4 mm)

Wire Speed 75–750 IPM (1.9–19 m/min)

Weight **22A:** 36 lb (15.4 kg) **24A:** 40 lb (18 kg)

The Power of Blue®

Wire feed speed range is 75–750! This offers a wider operating range than the competition.

Trigger hold control allows operator to make long extended welds without having to hold gun trigger.

Gear-driven drive rolls offer smooth, positive and accurate wire feed with long, uninterrupted service life. 24A has four drive rolls for larger wire diameters.

On-board burnback and motor ramp control offers unmatched starting and stopping performance on a variety of power sources. This helps to ensure positive arc starting performance.

Both include performance-matched Bernard® Q™-Gun, .035/.045 in drive roll and Centerfire™ contact tips.

16 gauge sheet metal housing is robust in rough service applications and less prone to damage.

Run-in standard on 24A for better arc-starting performance on a variety of wires. Optional for 22A.

Remote voltage control is standard on 24A. Parameter adjustments can be made in weld cell or at a remote location. Optional for 22A.

Specifications (Subject to change without notice.)

CV

Model	Input Power	Electrode Wire Diameter Capacity	Wire Speed	Dimensions	Net Weight
22A	24 VAC, 7 A, 50/60 Hz	.023–5/64 in (0.6–2.0 mm)	75–750 IPM (1.9–19 m/min)	H: 11 in (279 mm) W: 10-3/4 in (273 mm) D: 23-1/2 in (597 mm)	36 lb (15.4 kg)
24A		.023–3/32 in (0.6–2.4 mm)			40 lb (18 kg)

Certified to both the Canadian and U.S. Standards for welding equipment.

TRUE BLUE® 3YR. WARRANTY

Wire feeder is warranted for 3 years, parts and labor.

MADE IN USA
APPLETON, WI

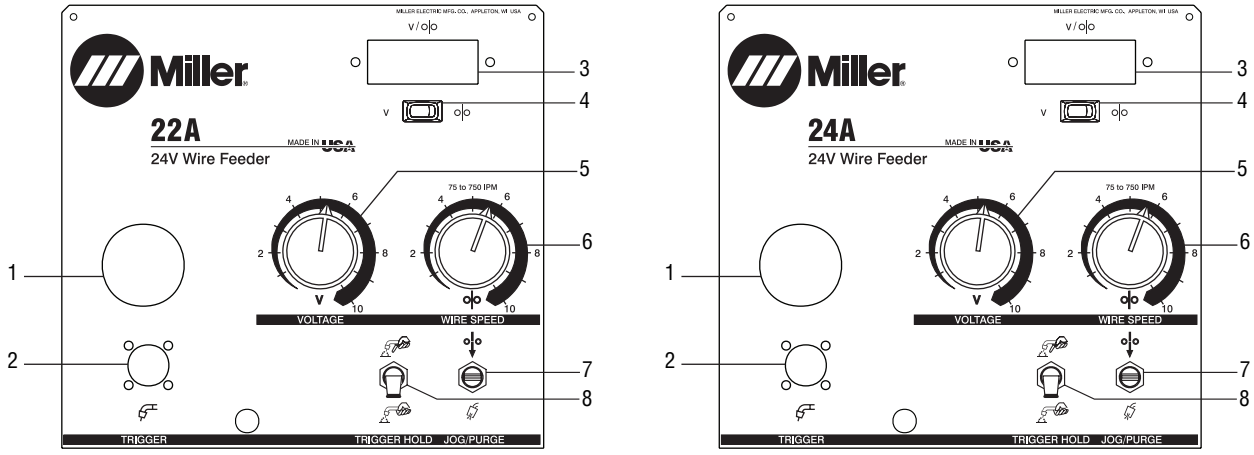
Miller Electric Mfg. Co.
An Illinois Tool Works Company
1635 West Spencer Street
Appleton, WI 54914 USA

International Headquarters
Phone: 920-735-4505
USA FAX: 920-735-4134
Canadian FAX: 920-735-4169
International FAX: 920-735-4125

Web Site
www.MillerWelds.com

ISO 9001:2000 REGISTERED QUALITY SYSTEM

Control Panel



1. Gun Connection
2. Trigger Receptacle
3. Voltage/Wire Speed Meter*
4. Meter Selection Switch*
5. Remote Voltage Control**
6. Wire Speed Control
7. Jog/Purge
8. Trigger Hold (On/Off)

Power On/Off (on rear panel)

**Optional*
***Optional on 22A, standard on 24A*

Drive Roll Kits (Order from Miller Service Parts.)

Select drive roll kits from chart below according to type and wire size being used. Drive roll kits include the necessary guides and feature an anti-wear sleeve for inlet guide.

	"V" groove for hard wire		"U" groove for soft wire or soft-shelled cored wires		"V" knurled for hard-shelled cored wires		"U" cogged for extremely soft wire or soft-shelled cored wires (i.e., hard facing types)	
Wire Size	**22A 2-Roll Kit**	**24A 4-Roll Kit**	**22A 2-Roll Kit**	**24A 4-Roll Kit**	**22A 2-Roll Kit**	**24A 4-Roll Kit**	**22A 2-Roll Kit**	**24A 4-Roll Kit**
.023/.025 in (0.6 mm)	**#087 131**	—	—	—	—	—	—	—
.030 in (0.8 mm)	**#079 594**	**#046 780**	—	—	—	—	—	—
.035 in (0.9 mm)	**#079 595**	**#046 781**	**#044 749**	**#044 750**	**#079 606**	**#046 792**	—	—
.040 in (1.0 mm)	**#161 189**	**#161 190**	—	—	—	—	—	—
.045 in (1.1/1.2 mm)	**#079 596**	**#046 782**	**#079 599***	**#046 785**	**#079 607**	**#046 793**	**#083 318**	**#083 319**
.052 in (1.3/1.4 mm)	**#079 597**	**#046 783**	**#079 600**	**#046 786**	**#079 608**	**#046 794**	**#083 317**	**#083 320**
1/16 in (1.6 mm)	**#079 598**	**#046 784**	**#079 601**	**#046 787**	**#079 609**	**#046 795**	**#079 614**	**#046 800**
.068/.072 in (1.8 mm)	—	—	—	—	**#089 984**	**#089 985**	—	—
5/64 in (2.0 mm)	—	—	**#079 602**	**#046 788**	**#079 610**	**#046 796**	**#079 615**	**#046 801**
3/32 in (2.4 mm)	—	—	—	**#046 789****	—	**#046 797****	—	**#046 802****

**Accommodates .045 and .047 in (3/64 mm) wires.*

***3/32 in inlet guide (#194 264) is required when using 3/32 in drive rolls.*

Nylon Wire Guides for Feeding Aluminum Wire (Order from Miller Service Parts.)

Wire Size	Inlet Guide
.035–.047 in (1.2 mm) 1/16 in (1.6 mm)	**#151 203** **#151 205**

Note: "U" groove drive rolls are recommended when feeding aluminum wire.

Genuine Miller Options and Accessories

Digital Display V/WFS #186 498 Field
Dual-function, back-lit LCD digital meter with selector switch. The digital meter allows the wire feed speed to be preset in inches per minute or meters per minute. The voltage function, if used with a current manufactured Miller electronically controlled constant voltage power source, allows the arc voltage to be preset and monitored on the digital display. When used with voltage control #194 211.

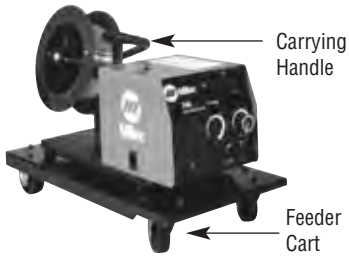
Voltage Control #194 211 Field
Standard on 24A. Installs in front panel of the feeder to allow remote voltage control of most Miller electrically controlled CV or CC/CV power sources.
Note: The field kit voltage control includes a 10 ft (3 m) cord that replaces the standard cord supplied with the feeder.

Run-In Control #193 391 Field
Standard on 24A. A separate wire feed speed adjustment to control wire speed prior to arc initiation. This control may be beneficial to aid arc starting with certain types of power sources.

Preflow/Postflow and Spot Control #186 496 Field
Installs inside feeder under an easy access hinged cover. Provides up to 5 seconds of spot weld time and has adjustable timers (0.25 to 5 seconds) for controlling gas flow prior to arc initiation and after completion of weld.

Carrying Cart #056 301
A utility cart for the wire feeder and other miscellaneous welding supplies.
Height: 34 in (863 mm) Lower tray height: 9 in (228 mm) Shipped disassembled.

Feeder Cart #142 382
A low-profile, creeper cart which allows the operator to easily move the feeder around the work area. Shipped disassembled.



Carrying Handle #193 762
For lifting and moving feeder. (Cannot be used with wire reel assembly **#108 008**.)

Hanging Bail #058 435
Suspends feeder over the work area.

Reel Cover #195 412
For 60 lb (27.2 kg) coil.

Spool Cover #057 607
For 12 in (304 mm) spool.

Wire Reel Assembly #108 008
For 60 lb (27.2 kg) coil of wire. (Cannot be used with carrying handle **#193 762**.)

Turntable Assembly #146 236
Allows rotation of feeder as operator changes work positions. This reduces strain and bending on gun cable.

Spool Adapter #047 141
For use with 14 lb (6.4 kg) spool of Lincoln self-shielding wire.

PSA-2 Control #141 604
Required when using the 22A wire feeder with power sources having only 115 VAC available. The PSA-2 control can be conveniently mounted on the wire feeder or positioned at the power source. The control is equipped with a 14-pin receptacle for direct connection of the wire feeder control cord. A short cord with a 4-pin Amp plug is hard wired to the control. A 10 ft (3 m) interconnecting cord with a 4-pin Amp for connection to the PSA-2 and Hubbell connectors for older-style Miller CV power sources is included. The PSA-2 control can also be used with competitive power sources requiring a contact closure for contactor control.

Extension Cords
#122 973 25 ft (7.6 m)
#122 974 50 ft (15 m)
#122 975 75 ft (23 m)
These extension cords can be added to the standard 10 ft cord to extend feeder farther from the power source.

2/0 MIG Welding Accessory Kit #173 856
25 ft (7.6 m). Includes gas hose, weld cable and work cable with clamp.

Ordering Information

Power Source and Options	Stock No.	Description	Qty.	Price
22A	**#193 066** **#193 066-01-1** **#193 066-02-2**	 With run-in control With digital display and voltage control		
24A	**#195 112**			
Drive Roll Kit		See table on page 2		
Digital Display Meter	**#186 498**	Field.		
Voltage Control	**#194 211**	Field. Standard on 24A		
Run-In Control	**#193 391**	Field. Standard on 24A		
Preflow/Postflow and Spot Control	**#186 496**	Field		
Power Sources				
CP-302		See Lit. Index No. DC/13.0		
XMT 456		See Lit. Index No. DC/18.8		
Deltaweld 302		See Lit. Index No. DC/16.2		
XMT 350 CC/CV		See Lit. Index No. DC/18.8		
XMT-304 CC/CV		See Lit. Index No. DC/18.8		
Invision 354 MP		See Lit. Index No. DC/23		
Accessories				
Carrying Cart	**#056 301**			
Feeder Cart	**#142 382**			
Carrying Handle	**#193 762**			
Hanging Bail	**#058 435**			
Reel Cover	**#195 412**	For 60 lb coil		
Spool Cover	**#057 607**	For 12 in spool		
Wire Reel Assembly	**#108 008**			
Turntable Assembly	**#146 236**			
Spool Adapter	**#047 141**	For 14 lb spool of Lincoln self-shielding wire		
PSA-2 Control	**#141 604**			
Extension Cords	**#122 973** **#122 974** **#122 975**	25 ft 50 ft 75 ft		
Bernard® Q™-Gun				
Roughneck® MIG Guns				
Miscellaneous				
Primary Power Cable				
Secondary Weld Cable				
Work Cable with Work Clamp				
Gas Cylinder				
Gas Hose with Fittings				
Regulator/Flowmeter				
Welding Wire				
Helmet				
Welding Gloves				

Date: **Total Quoted Price:**

Distributed by:

Miller®

Litho in USA

SuitCase™ 8VS

Issued October 2006 • Index No. M/6.4

Voltage-Sensing Wire Feeder

Quick Specs

Industrial Applications
Shipbuilding
Construction
Heavy Manufacturing
Rental

Processes
MIG (GMAW)
Flux Cored (FCAW)

Input Power 15–100 VDC

Weight 23.5 lb (10.7 kg)

The Power of Blue®

Ergonomically sound, lightweight unit is well balanced, for ease of carrying to remote welding sites. Fits through a 14 in (25 mm) manhole/manway

Carrying handle folds down out of way, yet is large enough for a gloved hand.

Standard contactor and gas solenoid control OCV and gas flow.

Totally enclosed, impact-resistant, flame-retardant case provides strength and durability, protecting components and weld wire from moisture, dust and contaminants.

Operates on open-circuit or arc voltages, eliminating the need for a control cable between the power source and feeder.

Component assembly is easily removed for servicing.

SuitCase™ 8VS with Q300 Bernard® Gun shown (not included)

Quick-change drive rolls are easy to change — no tools required.

Drive roll accessibility makes it easy to install wire, adjust tension and change drive rolls.

Versatile feeder can run wire diameters up to 1/16 in (1.6 mm).

Simple control panel eliminates operator confusion.

Gas purge purges gas line without feeding wire, or energizing weld wire.

Overload protection protects motor and control circuit against possible damage due to overloading conditions.

Universal feeder operates with most Miller and competitive CV/CC DC power sources.

Specifications (Subject to change without notice.)

CC CV DC *(Use with CC/CV, DC Power Sources.)*

Input Power	Welding Power Source Type	Input Welding Circuit Rating	Electrode Wire Diameter Capacity	Maximum Spool Size Capacity	Wire Speed	Dimensions	Net Weight
Open-Circuit Arc Voltage 15–100 VDC	Constant Voltage (CV) or Constant Current (CC) DC	330 A at 60% Duty Cycle	Solid Wire: .023–1/16 in (0.6–1.6 mm) Flux Cored: .030–1/16 in (0.8–1.6 mm)	8 in (203 mm) 14 lb (6.4 kg)	50–700 IPM (1.3–18 m/min) dependent on arc voltage	H: 14-1/2 in (368 mm) W: 6-1/2 in (165 mm) D: 15-5/8 in (397 mm)	23.5 lb (10.7 kg)

TRUE BLUE® 3YR. WARRANTY

Wire feeder is warranted for 3 years, parts and labor.

MADE IN USA
APPLETON, WI

Miller Electric Mfg. Co.
An Illinois Tool Works Company
1635 West Spencer Street
Appleton, WI 54914 USA

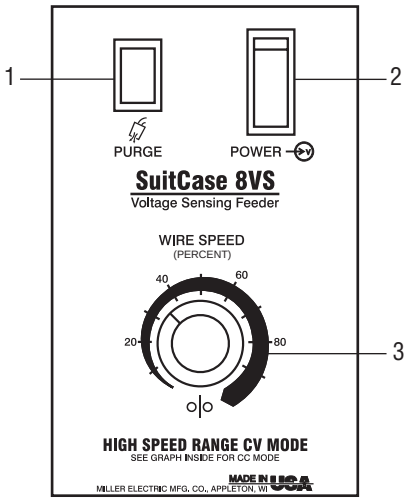
International Headquarters
Phone: 920-735-4505
USA FAX: 920-735-4134
Canadian FAX: 920-735-4169
International FAX: 920-735-4125

Web Site
www.MillerWelds.com

ISO 9001:2000 REGISTERED QUALITY SYSTEM

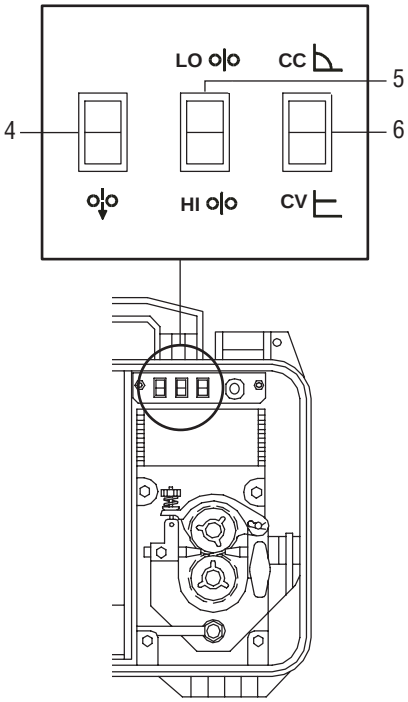
Control Panels

Front Control Panel



1. Purge Switch
2. Power Control Switch
3. Wire Speed Control
4. Jog Switch
5. HI/LO Range Switch
6. CC/CV Switch

Interior Control Panel



Drive Roll Kits (Order from Miller Service Parts.)

Select drive roll kits from chart below according to type and wire size being used. Drive roll kits include 2 drive rolls, the necessary guides and feature an anti-wear sleeve for inlet guide.

Wire size	"V" groove for hard wire	"U" groove for soft wire or soft-shelled cored wires	"V" knurled for hard-shelled cored wires	"U" cogged for extremely soft wire or soft- shelled cored wires (i.e., hard facing types)
.023 / .025 in (0.6 mm)	**#087 131**	—	—	—
.030 in (0.8 mm)	**#079 594**	—	—	—
.035 in (0.9 mm)	**#079 595**	**#044 749**	**#079 606**	—
.040 in (1.0 mm)	**#161 189**	—	—	—
.045 in (1.1/1.2 mm)	**#079 596**	**#079 599**	**#079 607**	**#083 318**
.052 in (1.3/1.4 mm)	**#079 597**	**#079 600**	**#079 608**	**#083 317**
1/16 in (1.6 mm)	**#079 598**	**#079 601**	**#079 609**	**#079 614**
.068/.072 in (1.8 mm)	—	—	**#089 984**	—
5/64 in (2.0 mm)	—	**#079 602**	**#079 610**	**#079 615**

Ordering Information

Power Source and Options	Stock No.	Description	Qty.	Price
SuitCase 8VS™	**#194 890** **#194 890-01-1** **#194 890-01-2** **#194 890-01-3** **#194 890-02-1**	Standard model With trigger hold With **CE** and trigger hold With meters With meters and trigger hold		
Meter Kit	**#195 029**	Meters (field)		
Guns				
Ironmate™ 1260 (FCAW)		See Lit. Index No. AY/16.0		
Roughneck® C-Series (GMAW)		See Lit. Index No. AY/17.0		
Power Sources				
XMT® Series		See Lit. Index No. DC/18.8		
Dimension™		See Lit. Index No. DC/19.2		
Gold Star®		See Lit. Index No. DC/8.1		
Mark VI™		See Lit. Index No. DC/9.8		
Big Blue® 400/500		See Lit. Index No. ED/10.8		
Big Blue® Turbo		See Lit. Index No. ED/10.3		
PipePro™ 304		See Lit. Index No. ED/10.6		
Big Blue® Air Pak™		See Lit. Index No. ED/10.5		
Bobcat™ Series		See Lit. Index No. DC/4.4		
Trailblazer® Series		See Lit. Index No. DC/4.77		
Consumables				
Drive Rolls				
Wire				

Date: **Total Quoted Price:**

Distributed by:

Miller®

Litho in USA

70 Series

Issued Feb. 2007 • Index No. M/3.0

Constant-Speed Wire Feeder

Quick Specs

CE

Heavy Industrial Applications
Heavy Manufacturing
Metal Fabrication
Construction
Light Manufacturing

Processes
MIG (GMAW)
Flux Cored (FCAW)
(Gas- and Self-Shielded)

Input Power 24 VAC, 10 A, 50/60 Hz
Electrode Wire Diameter Capacity .023–5/64 in (0.6–2 mm)
Wire Speed 50–780 IPM (1.3–19.8 m/min)
Weight 58 lb (26 kg)

The Power of Blue®

All the features of the 60 Series, plus enhanced flexibility and additional features.

Models:
74S: Standard, basic design
74D: Digital meters
74DX: Deluxe—digital, full-feature

Bernard® Q-Gun™ and drive rolls included. One set of each .035 in (0.9 mm) and .045 in (1.1/1.2 mm) "V" groove drive rolls.

Trigger receptacle oriented in a downward position to reduce potential damage.

Trigger hold reduces operator fatigue by allowing the operator to make long welds without having to energize the trigger continuously.

Automatic run-in control significantly improves arc starting performance.

10 ft, 14-pin interconnecting cord for the operator to hook up.

Posifeed™ Wire Drive Assembly Features

- 24 VDC high-torque, permanent-magnet motor.
- Quick-change drive rolls.
- Quick-release, calibrated drive-roll pressure adjustment arm allows drive roll change without losing spring preload setting.
- **Four sealed ball bearing all-gear-driven drive-roll carriers** for smooth, positive and accurate wire feed with long uninterrupted service life.
- Easy loading and threading of welding wire without having to release the drive-roll pressure arm.
- **Solid-state speed control and brake circuit** eliminates the need for electrical/ mechanical relays and increases service life.
- Uses Miller standard 1-5/8 in (41 mm) diameter drive rolls.
- Quick-connect for all Miller guns.
- Covered drive rolls—easy access, heavy-duty, molded composite cover over drive assembly.
- Floating positive drive systems provide trouble-free feeding on a variety of wires.

DX Models Additional Features

Dual schedule allows operator to switch between two welding parameters without readjusting machine, eliminating downtime and enhancing quality.

Adjustable weld sequence control gives operator complete control of the welding parameters: preflow, run-in, weld time, crater, burnback and postflow.

Welding process range control locks parameters at a set percentage of welding parameters to ensure welding procedures and quality standards are maintained on the shop floor.

Four weld programs allow the operators to store four independent welding parameters reducing welding setup time. (Four programs available per side on dual model.)

TRUE BLUE® 3YR. WARRANTY

Wire feeder is warranted for 3 years, parts and labor.

MADE IN USA
APPLETON, WI

Miller®

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An Illinois Tool Works Company
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Web Site
www.MillerWelds.com

ISO 9001 REGISTERED QUALITY SYSTEM

Specifications (Subject to change without notice.)

CV (Use with CV Power Sources.)

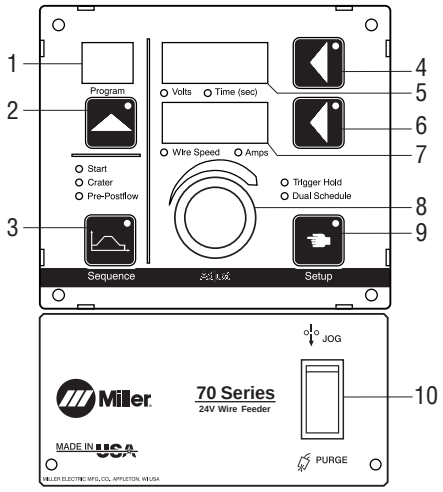
Input Power	Electrode Wire Diameter Capacity	Wire Speed*	Dimensions S-74 (Single)	D-74 (Dual)	Net Weight S-74 (Single)	D-74 (Dual)
24 VAC, 10 A, 50/60 Hz	.023–5/64 in (0.6–2 mm)	50–780 IPM (1.3–19.8 m/min) Optional High Speed Motor: 90–1440 IPM (2.3–36.6 m/min)	H: 14 in (356 mm) W: 12 in (305 mm) D: 26-1/2 in (673 mm)	H: 14 in (356 mm) W: 12-1/2 in (318 mm) D: 35 in (889 mm)	58 lb (26 kg)	87 lb (35.5 kg)

Note: When using 3/32 – 1/8 in (2.4 – 3.2 mm) wires contact Miller Electric Mfg. Co. at 1-920-735-4505 for more information on Low Speed options.

Control Panel

S-74DX Model

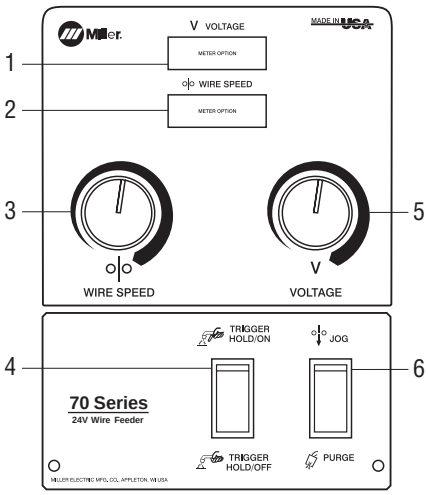
1. Program Display
2. Program # Select
3. Weld Sequence
4. Voltage/Time Select
5. Voltage/Time Display Meter
6. Wire Feed/ Amperage Select
7. Wire Speed/ Amperage Display Meter
8. Control Knob
9. Trigger Hold/Dual Schedule Control
10. Jog/Purge



S-74S and S-74D Model

1. Voltage Display Meter*
2. Wire Speed Display Meter*
3. Wire Feed Speed Select
4. Trigger Hold
5. Voltage Select**
6. Jog/Purge

S-74D model only
****Optional on S-74S***



Drive Roll Kits and Guides (Order from Miller Service Parts.)

Select drive roll kits from chart below according to type and wire size being used. Drive roll kits include 4 drive rolls, the necessary guides and feature an anti-wear sleeve for inlet guide.

Wire Size	"V" groove for hard wire	"U" groove for soft wire or soft-shelled cored wires	"V" knurled for hard-shelled cored wires	"U" cogged for extremely soft wire or soft-shelled cored wires (i.e., hard facing types)
.023/.025 in (0.6 mm)	**#151 024**	—	—	—
.030 in (0.8 mm)	**#151 025**	—	—	—
.035 in (0.9 mm)	**#151 026**	**#151 036**	**#151 052**	—
.040 in (1.0 mm)	**#161 190**	—	—	—
.045 in (1.1/1.2 mm)	**#151 027**	**#151 037***	**#151 053**	**#151 070**
.052 in (1.3/1.4 mm)	**#151 028**	**#151 038**	**#151 054**	**#151 071**
1/16 in (1.6 mm)	**#151 029**	**#151 039**	**#151 055**	**#151 072**
.068/.072 in (1.8 mm)	—	—	**#151 056**	—
5/64 in (2.0 mm)	—	**#151 040**	**#151 057**	**#151 073**
3/32 in (2.4 mm)	—	**#151 041**	**#151 058**	**#151 074**
7/64 in (2.8 mm)	—	**#151 042**	**#151 059**	**#151 075**
1/8 in (3.2 mm)	—	**#151 043****	**#151 060****	**#151 076****

*Accommodates .045 and .047 (3/64 in) wire. ** May require a low-speed, wire-feed drive-roll option.

Nylon Wire Guides for Feeding Aluminum Wire

Wire Size	Inlet Guide	Intermediate Guide
.047 in (1.2 mm)	**#151 203**	**#151 204**
1/16 in (1.6 mm)	**#151 205**	**#151 206**
3/32 in (2.4 mm)	**#151 207**	**#151 208**

Note: "U" groove drive rolls are recommended when feeding aluminum wire.

Wire Guides

Wire Size	Inlet Guide	Intermediate Guide
.023–.040 in (0.6–1.0 mm)	**#150 993**	**#149 518**
.045–.052 in (1.1–1.4 mm)	**#150 994**	**#149 519**
1/16–5/64 in (1.6–2 mm)	**#150 995**	**#149 520**
3/32–7/64 in (2.4–2.8 mm)	**#150 996**	**#149 521**
1/8 in (3.2 mm)	**#150 997**	**#149 522**

Miller

Genuine Miller Options and Accessories

Remote Voltage Control
#194 988 Field Non-digital for S-74S
#194 991 Field Non-digital for D-74S

Conversion Kit
#194 989 Field S-74S to S-74D
#194 992 Field D-74S to D-74D
#195 010 Field S-74S to S-74DX
#195 041 Field D-74S to D-74DX

Control Detachment Kit
#194 914 Field 10 ft (3 m) for S-74
#194 913 Field 25 ft (7.6 m) for S-74
#194 995 Field 25 ft (7.6 m) for D-74
Allows separation of the control module from the wire drive assembly and base.

Carrying Cart #056 301
A utility cart for the wire feeder and other miscellaneous welding supplies. Height: 34 in (863 mm). Lower tray height: 9 in (228 mm). Shipped disassembled.

Feeder Cart #142 382
A low-profile, creeper cart which allows the operator to easily move the feeder around the work area. Shipped disassembled.

Turntable Assembly #146 236
Allows rotation of the feeder as the operator changes work positions. Reduces strain and bending on the gun cable.

Hanging Bail (Electrically Isolated) #058 435
Used for suspending feeder over work area.

Wire Straightener
#141 580 For .035–.045 in (0.9–1.1 mm) diameter wire.
#141 581 For 1/16–1/8 in (1.6–3.2 mm) diameter wire.
Helps reduce the cast in wire to improve wire feeding performance and increase the service life of the gun liner and contact tip.

Spool Covers
#057 607 For S-74 and left side of D-74 models
#090 389 For right side of D-74 models
For 12 in (305 mm) spool.

Wire Reel Assembly #108 008
For 60 lb (27 kg) coil of wire.

Reel Covers
#058 256 For S-74 and left side of D-74 models
#091 668 For right side of D-74 models
For 60 lb (27 kg) coil. Helps to protect the welding wire from dust and other contaminants.
Note: Reel and Spool Covers cannot be installed if the wire drive assembly is in a rotated position.

Spool Adapter #047 141
For use with 14 lb (6.4 kg) spool of Lincoln self-shielding wire.

2/0 MIG Welding Accessory Kit #173 856
25 ft (7.6 m). Includes gas hose, weld cable and ground cable with clamp.

Extension Cords
#122 973 25 ft (7.6 m)
#122 974 50 ft (15 m)
#122 975 75 ft (23 m)
Provides 14-pin, 24 VAC, contactor and voltage control. Add to the standard 10 ft (3 m) feeder cord to extend feeder farther from power source.

Dual Schedule Switches

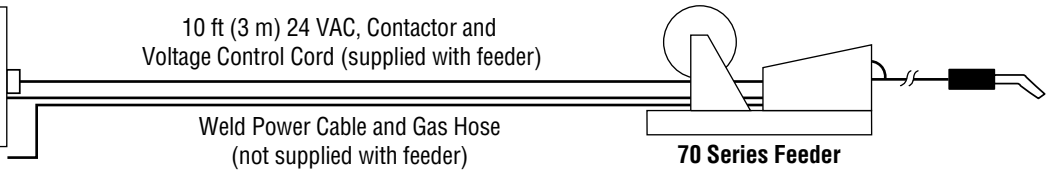
DSS-8 #079 693
A two-position trigger switch which attaches to the gun handle and is used in place of the standard trigger for dual scheduling. ***(For 74DX models only.)***

DSS-9 #071 833
A two-position slide switch which attaches to the gun handle and is used to select the desired welding condition for dual schedule purposes. The gun trigger operates as a standard gun trigger. ***(For 74DX models only.)***

Swingarc™ Boom-Mounted Wire Feeders
Swingarc boom-mounted semiautomatic wire feeders bring an extra dimension of flexibility and efficiency to high-production wire welding stations. You get an effective solution that maximizes output, especially when dealing with large weldments and hard-to-reach places. See Lit. Index No. M/13.11.

Typical Installation

Miller electrically controlled CV and CC/CV power source with a 14-pin receptacle and 24 VAC supply


10 ft (3 m) 24 VAC, Contactor and
Voltage Control Cord (supplied with feeder)
Weld Power Cable and Gas Hose
(not supplied with feeder)
70 Series Feeder

Ordering Information

Equipment and Options	Stock No.	Description	Qty.	Price
S-74S	**#195 057** **#195 057-02-1**	15 ft (4.6 m) Bernard Q400 gun and drive rolls With **CE**, Euro, 15 ft (4.6 m) Bernard Q400 gun and drive rolls		
S-74D	**#195 058** **#195 058-01-1** **#195 058-02-1** **#195 058-03-1**	15 ft (4.6 m) Bernard Q400 gun and drive rolls With high-speed motor, 15 ft (4.6 m) Bernard Q400 gun and drive rolls With **CE**, Euro, 15 ft (4.6 m) Bernard Q400 gun and drive rolls With **CE**, Euro, high-speed motor, 15 ft (4.6 m) Bernard Q400 gun and drive rolls		
S-74DX	**#195 059** **#195 059-01-1** **#195 059-02-1** **#195 059-03-1**	15 ft (4.6 m) Bernard Q400 gun and drive rolls With high-speed motor, 15 ft (4.6 m) Bernard Q400 gun and drive rolls With **CE**, Euro, 15 ft (4.6 m) Bernard Q400 gun and drive rolls With **CE**, Euro, high-speed motor, 15 ft (4.6 m) Bernard Q400 gun and drive rolls		
D-74S	**#195 060** **#195 060-02-1**	15 ft (4.6 m) Bernard Q400 gun and drive rolls With **CE**, Euro, 15 ft (4.6 m) Bernard Q400 gun and drive rolls		
D-74D	**#195 061** **#195 061-01-1** **#195 061-02-1** **#195 061-03-1**	15 ft (4.6 m) Bernard Q400 gun and drive rolls With high-speed motor, 15 ft (4.6 m) Bernard Q400 gun and drive rolls With **CE**, Euro, 15 ft (4.6 m) Bernard Q400 gun and drive rolls With **CE**, Euro, high-speed motor, 15 ft (4.6 m) Bernard Q400 gun and drive rolls		
D-74DX	**#195 062** **#195 062-01-1** **#195 062-02-1** **#195 062-03-1**	15 ft (4.6 m) Bernard Q400 gun and drive rolls With high-speed motor, 15 ft (4.6 m) Bernard Q400 gun and drive rolls With **CE**, Euro, 15 ft (4.6 m) Bernard Q400 gun and drive rolls With **CE**, Euro, high-speed motor, 15 ft (4.6 m) Bernard Q400 gun and drive rolls		
Remote Voltage Control	**#194 988** **#194 991**	Field. Non-digital control *(S-74S model only)* Field. Non-digital control *(D-74S model only)*		
Conversion Kit	**#194 989** **#194 992** **#195 010** **#195 041**	Field. S-74S to S-74D Field. D-74S to D-74D Field. S-74S to S-74DX Field. D-74S to D-74DX		
Control Detachment Kit	**#194 914** **#194 913** **#194 995**	Field. 10 ft (3 m) *(S-74S model only)* Field. 25 ft (7.6 m) *(S-74S model only)* Field. 25 ft (7.6 m) *(D-74S model only)*		
Replacement Gun and Consumables				
Bernard® Q400	**#Q4015AE8EM**	400 A, 15 ft (4.6 m)		
Centerfire™ consumables				
Power Sources				
CP-302		See Lit. Index No. DC/13.0		
Invision™ 354 MP and 456MP, 456P		See Lit. Index No. DC/23, DC/20		
Deltaweld® Series		See Lit. Index No. DC/16.2		
XMT® Series		See Lit. Index No. DC/18.8		
Dimension™ Series		See Lit. Index No. DC/19.2		
Accessories				
Adapter Kit	**#195 043**	Makes 70 Series feeder compatible with older-style power sources		
Carrying Cart	**#056 301**			
Feeder Cart	**#142 382**			
Turntable Assembly	**#146 236**			
Hanging Bail	**#058 435**	Electrically isolated		
Wire Straightener		See page 3		
Spool Covers	**#057 607** **#090 389**	For S-74 and left side of D-74 models For right side of D-74 models		
Wire Reel Assembly	**#108 008**			
Reel Covers	**#058 256** **#091 668**	For S-74 and left side of D-74 models For right side of D-74 models		
Spool Adapter	**#047 141**			
2/0 MIG Welding Accessory Kit	**#173 856**			
Extension Cords		See page 3		
Dual Schedule Switches	**#079 693** **#071 833**	DSS-8 *(74DX models only)* DSS-9 *(74DX models only)*		

Date: **Total Quoted Price:**

Distributed by:

Miller®

Litho in USA

Spool Guns and Controls

Spoolmate™ 3035, Spoolmate™ 3545, and Spoolmatic® 15A/30A

January 2005 • Index No. M/1.5

Wire Feeder

Quick Specs

Light and Heavy Industrial Applications
Aluminum Fabrication
Sign Manufacturing
Trailer Fabrication
Auto and Marine Repair

Processes
MIG (GMAW) with aluminum and other wires

Weight
Spoolmate 3035: 9 lb (4.1 kg) with cable assembly
Spoolmate 3545: 10 lb (4.5 kg) with cable assembly
Spoolmate 15A: 9 lb (4.1 kg) with cable assembly
Spoolmatic 30A: 14 lb (6.4 kg) with cable assembly

The Power of Blue®

Spoolmate™ 3035

These reliable yet economical Spoolmate spool guns **provide 20 ft cable reach and accessibility**, with **smooth feeding** of aluminum wire.

Spoolmate™ 3545

Spoolmatic®
15A /30A

Improved!
Barrel and Handle

Industrial, well-balanced Spoolmatic 15A/30A spool gun features a **built-in gas valve, rotatable canister, all-wire dual groove drive roll and 15 ft (15A) or 30 ft (30A) cable reach.** New barrels are Roughneck and Bernard Centerfire compatible. (See page 4 for optional consumables.)

Selecting a Spool Gun

What wire sizes are you running?	What welding output?	Recommended gun
.023 – .035 in	150 A at 60% duty cycle — light industrial applications	Spoolmate 3035
.030 – .047 in	200 A at 60% duty cycle — light industrial applications	Spoolmate 3545
.030 – 1/16 in	200 A at 100% duty cycle — light and heavy industrial applications	Spoolmatic 15A/30A

TRUE BLUE® WARRANTY

Spoolmate guns warranted for 90 days, parts and labor. Spoolmatic guns warranted for 1 year, parts and labor.

Miller®

Miller Electric Mfg. Co.
An Illinois Tool Works Company
1635 West Spencer Street
Appleton, WI 54914 USA

International Headquarters
Phone: 920-735-4505
USA FAX: 920-735-4134
Canadian FAX: 920-735-4169
International FAX: 920-735-4125

Web Site
www.MillerWelds.com

ISO 9001:2000 REGISTERED QUALITY SYSTEM

Specifications (Subject to change without notice.)

(Spoolmate — use with CV, DC Power Sources.)
(Spoolmatic — use with CC/CV, DC Power Sources.)

Spool Gun Specifications

Model	Welding Output Rating	Electrode Wire Diameter Capacity	Wire Speed	Maximum Spool Size Capacity	Dimensions	Net Weight with Cable Assembly
Spoolmate 3035	150 A at 60% Duty Cycle	.023–.035 in (0.6–0.9 mm) aluminum, steel and stainless steel	115–715 IPM	4 in (102 mm)	H: 11-1/2 in (291 mm) W: 2-1/4 in (57 mm) L: 8 in (203 mm)	9 lb (4.1 kg)
Spoolmate 3545	200 A at 60% Duty Cycle	.030–.047 in (0.8–1.2 mm) aluminum, steel and stainless steel	200–1200 IPM			10 lb (4.5 kg)
Spoolmatic 15A	200 A at 100% Duty Cycle	.030–1/16 in (0.6–1.6 mm) aluminum and hard wires up to .045 in (1.1 mm)	70–875 IPM		H: 10-1/4 in (260 mm) W: 2-1/2 in (64 mm) L: 15-1/8 in (384 mm)	9 lb (4.1 kg)
Spoolmatic 30A						14 lb (6.4 kg)

Spool Gun Control Specifications

Usage	Model	Input Power	Dimensions	Net Weight
For Spoolmate 3035 and 3545	SGA 100	115 VAC, 50/60 Hz	H: 4-1/4 in (108 mm) W: 6-3/8 in (162 mm) L: 10-1/2 in (267 mm)	9 lb (4.1 kg)
	SGA 100C	115 VAC, 50/60 Hz	H: 8-1/4 in (210 mm) W: 6-3/8 in (162 mm) L: 10-1/2 in (267 mm)	12 lb (5.4 kg)
For Spoolmatic 15A/30A	WC-24	24 VAC, 50/60 Hz	H: 7 in (178 mm) W: 5-1/2 in (140 mm) L: 2 in (51 mm)	2 lb (0.9 kg)
	WC-115A	115 VAC, 50/60 or 100 Hz	H: 10 in (254 mm) W: 9-1/2 in (241 mm) L: 13 in (330 mm)	20 lb (9 kg)

Spool Gun Hook-Up Recommendations

Power Source	Effective Serial Number	Spoolmate 3035 #195 016 150 A, 60% Duty Cycle	Spoolmate 3545 #195 015 200 A, 60% Duty Cycle	Spoolmatic 15A #195 156/ Spoolmatic 30A #130 831 200 A, 100% Duty Cycle
Millermatic® 130 XP, 135	All	Limited to 14 gauge–1/8 in material SGA 100 required **#043 856**	Not recommended	Not recommended
Millermatic® Challenger 172, 175	All	SGA 100 required **#043 856**	Not recommended	Not recommended
Millermatic® 185	Prior to **#KH376829**	Retrofit Kit required **#186 871** and **#207 642**	Retrofit Kit required **#186 871**	Not recommended
	After **#KH376829**	Direct hook-up using toggle switch field kit **#207 642**	Direct hook-up using toggle switch field kit **#207 642**	Not recommended
Millermatic® 210	All	Direct hook-up, Gun-On-Demand™	Not recommended	Not recommended
Millermatic® Vintage, 250	All	Not recommended	SGA 100 required **#043 856**	Module required **#043 084**
Millermatic® 250X, 251	All	Not recommended	Not recommended	Direct hook-up
Millermatic® 350, 350P	All	Not recommended	Not recommended	Direct hook-up, Gun-On-Demand™

Spoolmate 3035 and 3545 Spool Gun Controls

SGA 100 #043 856
Required to connect Spoolmate spool gun to the Millermatic 135 or 175. Allows you to connect a Spoolmate gun to virtually any similar MIG welder—Miller or other brands.

Includes 10 ft (3 m) 115 VAC power cable and plug, 6 ft (1.8 m) interconnecting cable, and 5 ft (1.5 m) gas hose.

Note: For CV engine drives like Miller Bobcat™, use the SGA 100C with contactor (#043 857).

SGA 100C #043 857
SGA with contactor required to connect Spoolmate spool gun to CV engine drives like Miller's Bobcat™.

Includes 10 ft (3 m) 115 VAC power cable and plug, 6 ft (1.8 m) interconnecting cable, and 5 ft (1.5 m) gas hose.

Genuine Miller Spoolmate Consumables and Accessories (Order Consumables from Miller Service Parts.)

Note: Spoolmate 3035 Gun shipped with 3–.030 in and 3 – .035 in contact tips. Spoolmate 3545 Gun shipped with 3–.035 in and 3 – .047 in contact tips.

Consumables For Spoolmate 3035

Contact Tips (5 per package)
#199 730 For .023 in (0.6 mm) wire.
#186 419 For .030 in (0.8 mm) wire.
#186 406 For .035 in (0.9 mm) wire.

Nozzle #186 405

Drive Roll (1)
#199 731 For .023 in (0.6 mm) wire.
#186 413 For .030/.035 in (0.8/0.9 mm) wire.

Push Roll (1)
#199 732 For .023 in (0.6 mm) wire.
#186 414 For .030/.035 in (0.8/0.9 mm) wire.

Consumables For Spoolmate 3545

Contact Tips (5 per package)
#199 387 For .030 in (0.8 mm) wire.
#199 388 For .035 in (0.9 mm) wire.
#199 389 For .047 in (1.2 mm) wire.

Nozzle #199 386

Drive Roll (1)
#186 413 For .030/.035 in (0.8/0.9 mm) wire.
#199 396 For .047 in (1.2 mm) wire.

Push Roll (1)
#186 414 For .030/.035 in (0.8/0.9 mm) wire.
#199 397 For .047 in (1.2 mm) wire.

Accessories

25 ft Extension Cable #194 996

Spoolmate 3035 Heavy-Duty Barrel
#195 375
Ideal for demanding applications.
Rated at 200 A, 60% duty cycle.

Spoolmatic 30A Spool Gun Controls

WC-24 Weld Control #137 549
Packaged in a compact, lightweight, non-metallic enclosure, the WC-24 easily mounts directly on the power source. It's designed for use with Miller CV power sources supplying 24 VAC and 14-pin receptacles. The control includes a board-mounted potentiometer which can alter the drive motor acceleration rate to optimize arc starting performance.

WC-115A Weld Control
#137 546 Without contactor
#137 546-01-1 With contactor
This control operates on 115 VAC, and is designed primarily for CC DC power sources. It can also be used with CV power sources or DC engine drives supplying 115 VAC. When used with a CC source, the control circuit functions in a voltage-sensing mode. When used with a CV source, it functions as a constant-speed circuit.

Standard features include a wire run-in control and a drive motor acceleration control which ensure optimum arc starting performance, regardless of the type of power source being used. The WC-115A comes with a 10 ft (3 m), wall-type plug power cord.

WC-115 Contactor Kit #137 548 Field Recommended when using the Spoolmatic gun and WC-115A control with power sources that do not have a weld output contactor. (This is installed in the WC-115A.)

Contactor Rating:
400 amps at 30% duty cycle
330 amps at 60% duty cycle
250 amps at 100% duty cycle

Genuine Miller Spoolmatic 30A Accessories

Cable Cover #118 678
Protects gun hose and cable assembly from wear and abrasion. Features a full-length zipper.

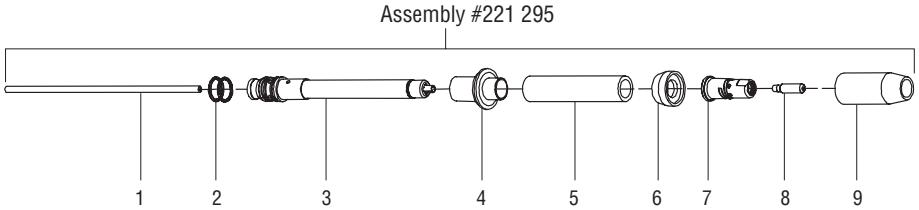
Spare Spool Canister #132 230
Canister accommodates 4 in (102 mm) spools of wire. Can be loaded with other popular wires to save time in changeover.

Hose and Cable Extension Kits
#132 228 25 ft (7.6 m)
#132 229 50 ft (15 m)
Extends Spoolmatic 30A away from the control box. Convenient plug-in connections. Includes gas hose, control cord, and weld power cable with International-style insulated connector.

Genuine Miller Spoolmatic 30A Consumables (Order from Miller Service Parts.)

Wire Size	FasTip Contact Tip	Spoolmatic Drive Rolls	Spoolmatic All-Wire Dual Groove Drive Rolls
.030 in (0.8 mm)	.041 in ID **#206 186**	**#183 357**	**#136 135**
.035 in (0.9 mm)	.047 in ID **#206 187**	**#183 357**	**#136 135**
.040 in (1.0 mm)	.053 in ID **#206 188**	**#183 357**	**#136 135**
.047 in (1.2 mm)	.061 in ID **#206 189**	**#183 358**	**#136 135**
.062 in (1.6 mm)	.071 in ID **#206 190**	**#183 358**	**#136 135**

Each gun is shipped with .035 in and .047 in standard tips.



1.	Head Tube Liner	**#212 156**
2.	O-Ring .614 ID	**#134 800**
4.	Head Tube (Air-cooled)	**#219 796**
5.	Barrel Pistol Insulator	**#219 795**
5.	Outer Insulating Jacket	**#219 794**
6.	Nozzle Insulator	**#198 856**
7.	Diffuser	**#206 195**
8.	Contact Tip	(See consumables)
9.	Nozzle	(See optional consumables)

XR Gun Genuine Miller Accessories

XR-Pistol Gun Barrels (Air-Cooled)

50 Degree Curved Barrel-A #222 462
6 in (152 mm). Used with .030–1/16 in (0.8–1.6 mm) wire. Kits supplied with liner that accommodates all wire sizes.

10 in Flex Head-A #222 735
10 in (254 mm). For .030–1/16 in (0.8–1/6 mm) wire. Used in place of the standard straight barrel. Flexible head tube bends 60 degrees in any direction for easier joint access and improved operator comfort. Supplied with liners. Uses FasTip™ contact tips.

10 in Head Tube-A #222 461
Ideal when a longer reach is required.

Replacement Liners for Air-Cooled Barrels
(Order from Miller Service Parts.)

For 6 in Curved Barrel
#212 411 .030–1/16 in (0.8–1.6 mm) wire

For 10 in Head Tube
#212 401 .030–1/16 in (0.8–1.6 mm) wire

For Flex Head
#222 853 .030–.035 in (0.8–0.9 mm) wire
#222 854 .047–.062 in (1.2–1.6 mm) wire

50 Degree Curved Nozzle Kit-A #147 174
Attaches to old-style gun barrel assembly for access to confined weld joint areas. Used with .030–1.16 in (0.8–1.6 mm) wire. Kit includes two of each size contact tips to accommodate all wire sizes, Nozzle Adapter Kit (#193 794) and curved nozzle. Uses standard straight barrel head tube liner.

Note: Kit only works with old-style colleted multi-piece barrel #193 142 and can be ordered through Miller Service Parts. Kit will not work with new Roughneck-style one piece front end.

Replacement Contact Tips for Curved Nozzle
(Order from Miller Service Parts.)
#148 155 .030 and .035 in (0.8 and 0.9 mm) wire
#148 154 .047 (1.2 mm) wire
#148 156 1/16 in (1.6 mm) wire

XR-Pistol Gun Barrels (Water-Cooled)

50 Degree Curved Barrel-W #222 464
6 in (152 mm). Used with .030–1/16 in (0.8–1.6 mm) wire. Kits supplied with liner that accommodates all wire sizes.

Replacement Liners for Air-Cooled Barrels
(Order from Miller Service Parts.)

For 6 in Curved Barrel
#212 411 .030–1/16 in (0.8–1.6 mm) wire

For 10 in Straight Barrel
#212 401 .030–1/16 in (0.8–1.6 mm) wire

10 in Straight Barrel-W #222 463
Used with .030–1/16 in (0.8–1.6 mm) wire. Kits supplied with liner that accommodates all wire sizes.

Genuine Miller Spoolmatic 30A Optional Consumables (Order from Miller Service Parts.)

Nozzles

#176 238* Spot Flat
#176 240* Spot Inside Corner
#176 242* Spot Outside Corner
#199 610 Screw-on brass, 1/2 in orifice
#199 611 Screw-on brass, 3/4 in orifice straight
#199 612 Screw-on brass, 3/4 in orifice straight heavy-duty
#199 613 Screw-on brass, 5/8 in orifice
#199 614 Screw-on brass, 5/8 in orifice heavy-duty
#199 615 Screw-on copper, 1/2 in orifice
#199 616 Screw-on copper, 3/4 in orifice
#199 617 Screw-on copper, 3/4 in orifice heavy-duty
#198 855 Screw-on copper, 5/8 in orifice
#199 618 Screw-on copper, 5/8 in orifice heavy-duty
#207 313 Screw-on copper, 5/8 in orifice 15/16 O.D.
#209 035** Screw-on copper, 3/8 in orifice tapered
#209 036** Screw-on copper, 1/2 in orifice tapered

**Requires Diffuser #209 099, used with any heavy-duty FasTip™ contact tip.*

***Requires Diffuser #206 195, #206 196, or #210 664. Used with any tapered FasTip™ contact tip.*

FasTip™ Contact Tips *(25 per package)*

Heavy-Duty
#206 186 .030/.035 in (0.8/0.9 mm) aluminum wire
#206 187 .040/.035 in (0.9/1.0 mm) aluminum wire
#206 188 .040/.045 in (1.0/1.2 mm) aluminum wire
#206 189 .052 in (1.3 mm) or 3/64 in (1.2 mm) aluminum wire
#206 190 1/16 in (1.6 mm)
#206 191 .068 in (1.7 mm) or 1/16 in (1.6 m) aluminum wire

Tapered
#209 026 .030/.035 in (0.8/0.9 mm) aluminum wire
#209 027 .035/.045 in (0.9/1.2 mm) aluminum wire
#209 028 3/64 in (1.2 mm)
#209 029 .052 in (1.3 mm)
#209 030 1/16 in (1.6 mm)

Gas Diffusers

#206 195 Standard
1/8 in tip recess for heavy-duty FasTip contact tips.

#210 664
1/4 in tip recess for heavy-duty FasTip contact tips.

#206 196
Flush tip for heavy-duty FasTip contact tips.

Centerfire® Series Consumables

T Series Contact Tips 1.5 in (38.1 mm)
T-030 .030 in (0.8 mm)
T-035 .035 in (0.9 mm)
T-039 .039 in (1.0 mm)
T-045 .045 in (1.2 mm)
T-052 .052 in (1.4 mm)
T-062 1/16 in (1.6 mm)
T-078 5/64 in (2.0 mm)
T-094 3/32 in (2.4 mm)
T-109 7/64 in (2.8 mm)
T-125 1/8 in (3.2 mm)

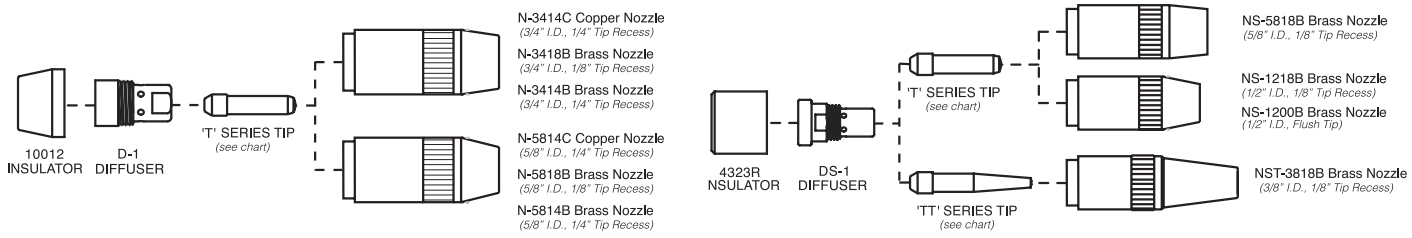
TT Series Contact Tips 2 in (50.8 mm)
TT-030 .030 in (0.8 mm)
TT-035 .035 in (0.9 mm)
TT-045 .045 in (1.2 mm)
TT-052 .052 in (1.4 mm)
TT-062 1/16 in (1.6 mm)

Insulator **10012**
4323R

Diffuser **D-1**
DS-1

Nozzles
N-3414C Copper, 3/4 in I.D., 1/4 in tip recess
N-3418B Brass, 3/4 in I.D., 1/8 in tip recess
N-3414B Brass, 3/4 in I.D., 1/4 in tip recess
N-5814C Copper, 5/8 in I.D., 1/4 in tip recess
N-5818B Brass, 5/8 in I.D., 1/8 in tip recess
N-5814B Brass, 5/8 in I.D., 1/4 in tip recess

NS-5818B Brass, 5/8 in I.D., 1/8 in tip recess
NS-1218B Brass, 1/2 in I.D., 1/8 in tip recess
NS-1200B Brass, 1/2 in I.D., flush tip
NST-3818B Brass, 3/8 in I.D., 1/8 in tip recess



Typical Installations

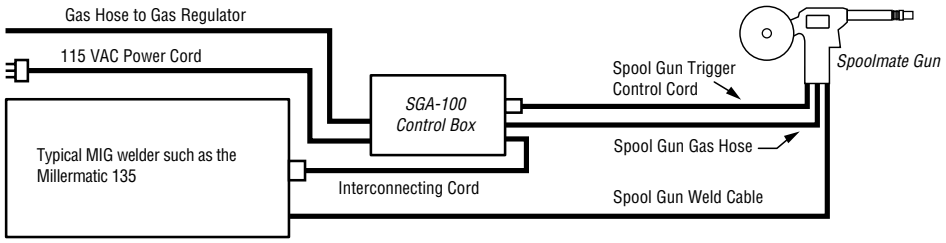
Spoolmate Gun to Welder Requiring a SGA Spool Gun Adapter

Note: Refer to SGA Owner's Manual for complete installation instructions.

For Millermatic 135, combine Spoolmate 3035 with SGA 100 to weld 14 gauge to 1/8 in aluminum.

For Millermatic 175, combine Spoolmate 3035 with SGA 100 to weld 14 gauge to 1/4 in aluminum.

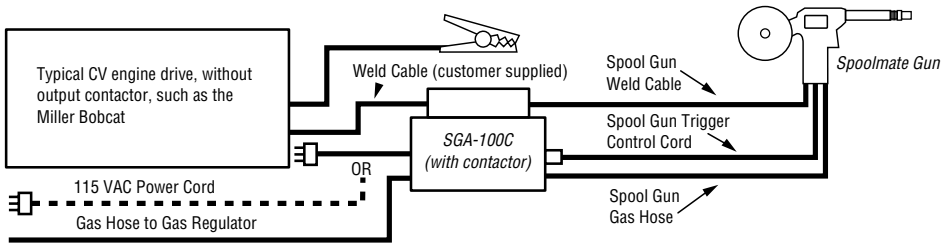
To weld aluminum with comparable, competitive power sources, the Spoolmate may also be used with one of the SGA units.


Gas Hose to Gas Regulator
115 VAC Power Cord
Typical MIG welder such as the Millermatic 135
SGA-100 Control Box
Interconnecting Cord
Spool Gun Trigger Control Cord
Spool Gun Gas Hose
Spool Gun Weld Cable
Spoolmate Gun

The SGA 100C is necessary when connecting Spoolmate spool guns to CV engine drive units. Thickness will depend on engine drive.

For Miller's Bobcat 225NT, combine Spoolmate 3545 with SGA 100C to weld 14 gauge to 3/16 in aluminum.

To weld aluminum with comparable, competitive power sources, the Spoolmate may also be used with one of the SGA units.

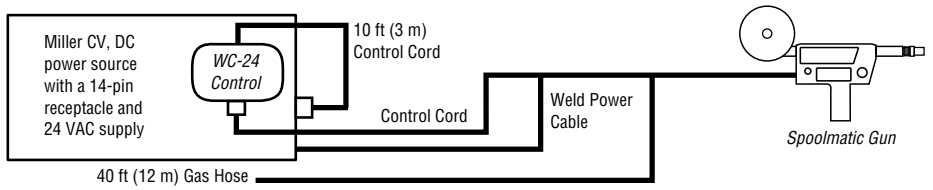

Typical CV engine drive, without output contactor, such as the Miller Bobcat
Weld Cable (customer supplied)
OR
115 VAC Power Cord
Gas Hose to Gas Regulator
SGA-100C (with contactor)
Spool Gun Weld Cable
Spool Gun Trigger Control Cord
Spool Gun Gas Hose
Spoolmate Gun

Spoolmatic 15A/30A

Note: Cords and cables are supplied unless noted otherwise on drawings below. Refer to Owner's Manual for complete installation instructions.

To connect the Spoolmatic 15A/30A and WC-24 control to older-style Miller or competitive CV power sources that **do not** have a 24 VAC supply, the PSA-2 control **#141 604** is required.

To connect Spoolmatic 15A/30A gun and WC-24 control to Millermatic® 200 and Spoolmate™ 200 power sources that have a 4-pin receptacle, order adapter cord **#042 236**.


Miller CV, DC power source with a 14-pin receptacle and 24 VAC supply
WC-24 Control
10 ft (3 m) Control Cord
Control Cord
Weld Power Cable
40 ft (12 m) Gas Hose
Spoolmatic Gun

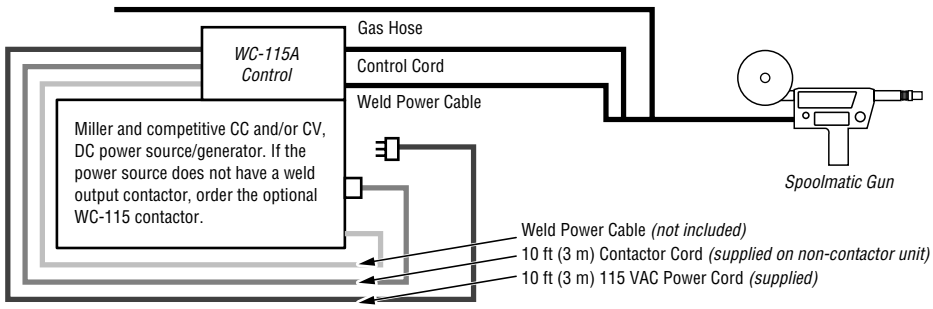
To connect the WC-115A control to older-style Miller power sources having Hubbell or 5-pin contactor control receptacles, the appropriate connector must be ordered **separately**:

To connect to older-style Miller CC power sources having a two-socket Hubbell connector, order plug **#039 618**.

If power source has a Miller 5-pin receptacle, order **#039 273 and #039 685**.

To connect to older-style Miller CV power sources having a two-prong Hubbell connector, order plug **#039 635**.

Note: These connectors are to replace the 14-pin connector on the 10 ft interconnect contactor cord. Internal wiring changes may be necessary.


WC-115A Control
Gas Hose
Control Cord
Weld Power Cable
Miller and competitive CC and/or CV, DC power source/generator. If the power source does not have a weld output contactor, order the optional WC-115 contactor.
Spoolmatic Gun
Weld Power Cable (not included)
10 ft (3 m) Contactor Cord (supplied on non-contactor unit)
10 ft (3 m) 115 VAC Power Cord (supplied)

Ordering Information

Equipment	Stock No.	Description	Qty.	Price
Spoolmate™ 3035 Spool Gun	**#195 016**	Includes 20 ft (6 m) cable		
Spoolmate™ 3545 Spool Gun	**#195 015**	Includes 20 ft (6 m) cable		
Spoolmatic® 15A Spool Gun	**#195 156**	Includes 15 ft (4.6 m) cable		
Spoolmatic® 30A Spool Gun	**#130 831**	Includes 30 ft (9 m) cable		
Spoolmate Controls				
SGA 100	**#043 856**	For Spoolmate guns		
SGA 100C	**#043 857**	For Spoolmate guns		
Spoolmate Consumables and Accessories				
Consumables		See page 3		
25 ft Extension Cable	**#194 996**	Control cable extension for Spoolmate 3035 and 3545		
Spoolmate 3035 Heavy-Duty Barrel	**#195 375**	Rated at 200 A, 60% duty cycle		
Spoolmatic 15A/30A Controls				
WC-24 Weld Control	**#137 549**	For Spoolmatic guns		
WC-115A Weld Control	**#137 546** **#137 546-01-1**	Without contactor. For Spoolmatic guns With contactor. For Spoolmatic guns		
WC-115 Contactor Kit	**#137 548**	Field		
Spoolmatic 15A/30A Consumables and Accessories				
Consumables		See pages 4–6		
Cable Cover	**#118 678**			
Spare Spool Canister	**#132 230**			
Hose and Cable Extension Kits	**#132 228** **#132 229**	25 ft (7.6 m) 50 ft (15 m)		
XR-Pistol Gun Barrels		See page 5		

Date: **Total Quoted Price:**

Distributed by:

Miller®

Litho in USA

S-74 MPa Single Feeder Features

Posifeed™ Wire Drive Assembly Features
(Synergic Pulsed MIG when connected to the Invision 350 MPa)

- 24 VDC high-torque, permanent-magnet motor.
- Quick-change drive rolls.
- Quick-release, calibrated drive-roll pressure adjustment arm allows drive roll change without losing spring preload setting.
- **Four sealed ball bearing all-gear-driven drive-roll carriers** for smooth, positive and accurate wire feed with long uninterrupted service life.
- Easy loading and threading of welding wire without having to release the drive-roll pressure arm.
- **Solid-state speed control and brake circuit** eliminates the need for electrical/mechanical relays and increases service life.
- Uses Miller standard 1-5/8 in (41 mm) diameter drive rolls.
- Quick-connect for all Miller guns.
- Covered drive rolls — easy access, heavy-duty, molded composite cover over drive assembly.
- Floating positive drive systems provide trouble-free feeding on a variety of wires.

Tool-less rotatable drive assembly allows operator to rotate the drive housing, eliminating severe bends in the wire feed path which reduce gun liner life. Also aids in feeding difficult wires.

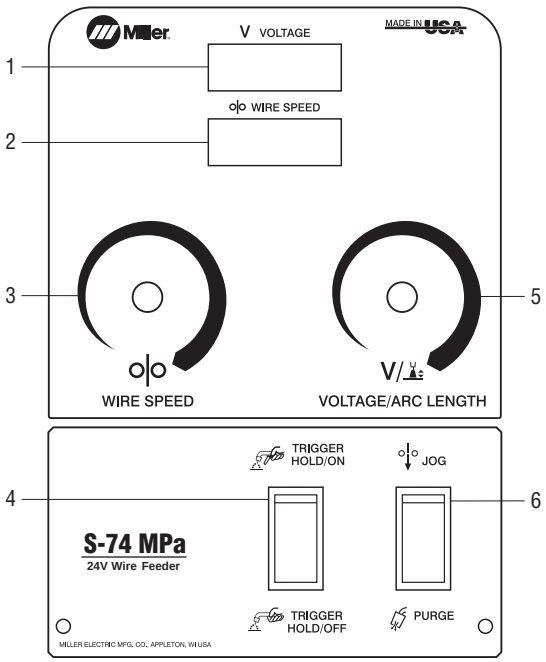
Dual tension control adds flexibility for the operator to fine-tune the pressure on the wire independently when feeding a variety of wires.

Specifications (Subject to change without notice.)

CV *(Use with CV Power Sources.)*

Input Power	Electrode Wire Diameter Capacity	Wire Speed	Dimensions	Net Weight
24 VAC, 10 A, 50/60 Hz	.023–5/64 in (0.6–2 mm)	50–780 IPM (1.3–19.8 m/min) Optional High Speed Motor: 90–1440 IPM (2.3–36.6 m/min)	H: 14 in (356 mm) W: 12 in (305 mm) D: 26-1/2 in (673 mm)	58 lb (26 kg)

Control Panel



1. Voltage Display Meter
2. Wire Speed Display Meter
3. Wire Feed Speed Select
4. Trigger Hold
5. Voltage Select
6. Jog/Purge

SuitCase™ X-TREME™ 8VS & 12VS

Issued Sept. 2007 • Index No. M/6.41

Voltage-Sensing Wire Feeder

Quick Specs

Industrial Applications
Shipbuilding
Construction
Heavy Manufacturing
Rental

Processes
MIG (GMAW)
Flux Cored (FCAW)

Input Power 14–48 VDC Operating Voltage
110 VDC Maximum OCV

Wire Feed Speed 50–780 IPM (1.3–19.8 m/min)

Weight **8VS:** 28 lb (13 kg)
12VS: 35 lb (15.9 kg)

The Power of Blue®

***NEW!* X-TREME 8VS — Now in smaller 8VS size** for shipbuilding, maintenance or wherever a lighter, smaller, more portable feeder is required. Same great features of its big brother the X-TREME 12VS. Ergonomically sound, lightweight unit is well balanced for ease of carrying to remote welding sites. Fits through a 14 in (25 mm) manhole/manway.

Polypropylene case with built-in slide rails and the ability to open the door to change wire with feeder in vertical position.

Potted and trayed main printed circuit board for the harshest environments adds exceptional reliability. Board has full-trigger isolation so a shorted gun trigger will not affect feeder operation.

Improved contactor for high-amperage, high duty cycle applications (8VS: 330 A at 60%,12VS: 425 A at 60%).

New!

Now available in 8VS size with many of the features of the SuitCase X-TREME 12VS!

Trigger hold, wire jog, and gas purge are all located on front panel *(8VS: Trigger Hold optional)*.

Digital meters with SunVision™ technology can display voltage and wire speed, and also amperage if desired. Meters can be seen clearly even in direct sunlight *(8VS: Meters optional)*.

Wider voltage range for small and large wires with no contactor chatter or arc outages.

Double-filtered gas valve helps keep dirt from clogging and affecting gas flow.

Excellent starts and improved superior arc performance for all types and sizes of wires whether using CV or CC power supply.

Specifications (Subject to change without notice.)

CC/CV DC *(Use with CC/CV, DC Power Sources.)*

Model	Input Power	Welding Power Source Type	Input Welding Circuit Rating	Electrode Wire Diameter Capacity	Max. Spool Size Capacity	Wire Speed	Dimensions	Net Weight
8VS	Operates on open-circuit voltage and arc voltage: 14–48 VDC/ 110 Max OCV	CC or CV DC power sources. AC type not recommended.	330 A at 60% Duty Cycle	**Solid Wire:** .023–.062 in (0.6–1.6 mm) **Flux Cored:** .030–.062 in (0.8–1.6 mm)	8 in (203 mm) 14 lb (6.4 kg)	50–780 IPM (1.3–19.8 m/min) dependent on arc voltage	H: 12-3/4 in (324 mm) W: 7-1/4 in (184 mm) D: 18 in (457 mm)	28 lb (13 kg)
12VS		CC or CV DC power sources. AC type not recommended.	425 A at 60% Duty Cycle	**Solid Wire:** .023–5/64 in (0.6–2.0 mm) **Flux Cored:** .030–5/64 in (0.8–2.0 mm)	12 in (305 mm) Up to 45 lb (20.4 kg)		H: 21 in (533 mm) W: 9 in (229 mm) D: 15-1/2 in (394 mm)	35 lb (15.9 kg)

TRUE BLUE® 3YR. WARRANTY

Wire feeder is warranted for 3 years, parts and labor.

MADE IN USA
APPLETON, WI

Miller®

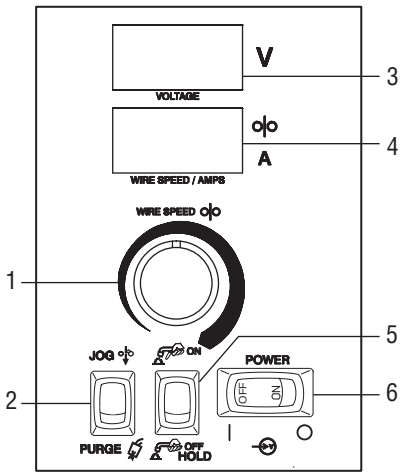
Miller Electric Mfg. Co.
An Illinois Tool Works Company
1635 West Spencer Street
Appleton, WI 54914 USA

International Headquarters
Phone: 920-735-4505
USA FAX: 920-735-4134
Canadian FAX: 920-735-4169
International FAX: 920-735-4125

Web Site
www.MillerWelds.com

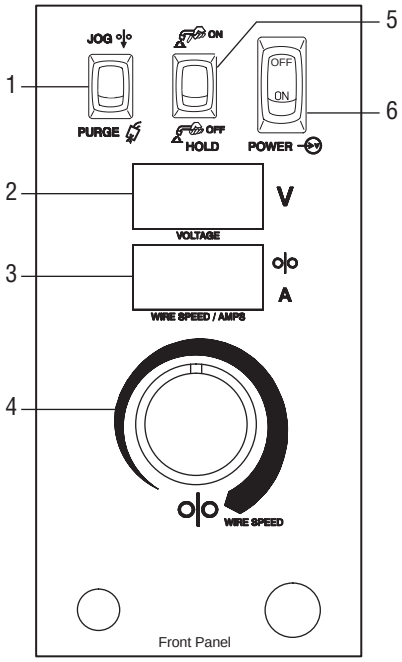
ISO 9001:2000 REGISTERED QUALITY SYSTEM

Control Panels



SuitCase X-TREME 8VS

1. Wire Speed Control
2. Jog/Purge Switch
3. Voltmeter (Optional)
4. Wire Speed/Amperage Meter (Optional)
5. Trigger Hold Switch (Optional)
6. Power Control Switch



SuitCase X-TREME 12VS

1. Jog/Purge Switch
2. Voltmeter
3. Wire Speed/Amperage Meter
4. Wire Speed Control
5. Trigger Hold Switch
6. Power Control Switch

Drive Roll Kits (Order from Miller Service Parts.)

Select drive roll kits from chart below according to type and wire size being used. Drive roll kits include 2 drive rolls, the necessary guides and feature an anti-wear inlet guide.

Wire size	"V" groove for hard wire	"U" groove for soft wire or soft-shelled cored wires	"V" knurled for hard-shelled cored wires	"U" cogged for extremely soft wire or soft- shelled cored wires (i.e., hard facing types)
.023 / .025 in (0.6 mm)	**#087 131**	—	—	—
.030 in (0.8 mm)	**#079 594**	—	—	—
.035 in (0.9 mm)	**#079 595**	**#044 749**	**#079 606**	—
.040 in (1.0 mm)	**#161 189**	—	—	—
.045 in (1.1/1.2 mm)	**#079 596**	**#079 599**	**#079 607**	**#083 318**
.052 in (1.3/1.4 mm)	**#079 597**	**#079 600**	**#079 608**	**#083 317**
1/16 in (1.6 mm)	**#079 598**	**#079 601**	**#079 609**	**#079 614**
.068/.072 in (1.8 mm)	—	—	**#089 984**	—
5/64 in (2.0 mm)	—	**#079 602**	**#079 610**	**#079 615**

Ordering Information

Power Source and Options	Stock No.	Description	Qty.	Price
SuitCase™ X-TREME™ 8VS	**#300 093** **#300 093-01-1** **#300 093-02-1**	With Bernard® Q300 Gun (Without meters or trigger hold) With Bernard® Q300 Gun & meters With Bernard® Q300 Gun, meters & trigger hold		
Meter Kit	**#300 331**	Field. For X-TREME 8VS		
Trigger Hold	**#300 332**	Field. For X-TREME 8VS		
SuitCase™ X-TREME™ 12VS	**#195 500**	With Bernard® Q300 Gun		
SuitCase™ X-TREME™ 12VS	**#300 414**	With Bernard® Dura-Flux™ gun		
Flowmeter Kit	**#195 217**			
Inline Filter	**#195 189**			
Spool Adapter	**#047 141**	For 14 lb spools/X-TREME 12VS only		
Guns				
Bernard® Q300 (GMAW)		See Welding Components and Parts Guide		
Bernard® Dura-Flux™ (FCAW)		See Welding Components and Parts Guide		
Ironmate™ 1260 (FCAW)		See Lit. Index No. AY/16.0		
Roughneck® C-Series (GMAW)		See Lit. Index No. AY/17.0		
Power Sources				
XMT® Series		See Lit. Index No. DC/18.8		
Dimension™		See Lit. Index No. DC/19.2		
Gold Star®		See Lit. Index No. DC/8.1		
Mark VI™		See Lit. Index No. DC/9.8		
Big Blue® Turbo		See Lit. Index No. ED/10.3		
Big Blue® 400 & 500		See Lit. Index No. ED/10.8		
Big Blue® Air Pak™		See Lit. Index No. ED/10.5		
Bobcat™		See Lit. Index No. ED/4.4		
Trailblazer®		See Lit. Index No. ED/4.77		
Consumables				
Drive Rolls				
Wire				

Date: **Total Quoted Price:**

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